

R E P O R T R E S U M E S

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CAPITAL REQUIREMENTS STUDY, APRIL 1964.

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THE PURPOSES OF THIS STUDY WERE--(1) TO FORMULATE A MODEL FOR ESTIMATING FUTURE PHYSICAL REQUIREMENTS CAPABLE OF EQUITABLY DIFFERENTIATING AND SUMMARIZING THE INDIVIDUAL NEEDS OF INDIANA'S FOUR STATE-SUPPORTED INSTITUTIONS, AND (2) TO DETERMINE AN ALLOCATION FORMULA FOR DISTRIBUTION OF AVAILABLE CAPITAL APPROPRIATIONS WITH BIENNIAL PROVISIONS FOR ADJUSTMENTS DUE TO FLUCTUATIONS IN ESTIMATED ENROLLMENTS AND CURRICULAR CHANGES. THE PLAN, SIMPLY STATED, REQUIRED THAT CURRENT 1962-3 FACILITIES BE SUBTRACTED FROM 1972-73 NEEDS, AND THAT THE RESULTING ADDITIONAL SPACE FOR EACH INSTITUTION REPRESENTED ITS PROPORTIONAL SHARE OF THE TOTAL 1962-1972 REQUIREMENTS. THE STUDY IS DIVIDED INTO FOUR MAJOR COMPONENTS--(1) THE COLLECTION AND CLASSIFICATION OF DATA CONCERNING STUDENTS, STAFF AND SPACE, (2) THE JOINT DEVELOPMENT OF APPROPRIATE AND EQUITABLE SPACE FACTORS AND RATIOS, (3) THE ESTABLISHMENT OF ENROLLMENT ESTIMATES FOR THE ACADEMIC YEAR 1972-73, AND (4) THE PROCEDURAL STEPS AND CALCULATIONS COMBINING THE ABOVE ITEMS INTO A SUMMARY REPORT OF FUTURE REQUIREMENTS. PRESENTED IN THIS REPORT IS THE METHODOLOGY, THE CALCULATED REQUIREMENTS, THE COLLECTED DATA ON STUDENT ENROLLMENT, STAFF AND SPACE INVENTORY, AND MANAGEMENT REPORTS ON ROOM UTILIZATION, CLASS ORGANIZATION, CLASS HOUR DISTRIBUTION AND PURDUE UNIVERSITY'S CLASSROOM REQUIREMENTS FOR 1960-68. (BH)

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SCHEDULES AND SPACE

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CAPITAL REQUIREMENTS STUDY

April 1964

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INTRODUCTION

The acts passed by the 86th session of the Indiana General Assembly stated in part that the "...four state universities and colleges shall cooperate in working out a formula to be presented periodically to the legislature and any other proper authorities for budgeting purposes...".* As a result of this act, the four state supported institutions of higher education--Ball State Teachers College, Indiana State College, Indiana University, and Purdue University--have, during the past 12 years, continued to improve and develop these cooperative inter-institutional management studies. This capital appropriation study is one result of these joint efforts.

The purposes of this study were: (1) to formulate a model for estimating future physical facility requirements capable of equitably differentiating and summarizing the individual needs of each of the institutions, and (2) to determine an allocation formula for distribution of available capital appropriations with biennial provisions for adjustments due to fluctuations in estimated enrollments and curricular changes. More than two years of combined talents of representatives from all four schools were required to formulate and finalize the plan that was utilized.

The plan, simply stated, required that current 1962-63 facilities be subtracted from 1972-73 needs, and that the resulting additional space for each institution represented its proportional share of the total 1962-72 requirements. However, as you begin to digest the detail data provided, it should become quite apparent that the task that was undertaken was by no means a simple one, nor was it one that was taken lightly. To inventory

*Chapter 257, Section 2, Page 908.

and to classify the more than 6,500,000 gross square feet of existing academic facilities, for example, required considerable time and effort and was not a simple task.

Specifically, the study was subdivided into four major components (1) the collection and classification of existing data concerning students, staff and space, (2) the joint development of appropriate and equitable space factors and ratios, (3) the establishment of enrollment estimates for the academic year 1972-73, and (4) the procedural steps and calculations combining the above items into a summary report of future requirements as outlined under "Procedures...Part 1" of this study. It should be further noted that a quality as well as a quantity analysis of existing buildings was made and incorporated into the body of this report. Likewise detailed documents including floor plans, student schedules and staff data are available in support of the summary data herein presented.

The results, summarized under Parts 2 and 3 of the study, are indicative of the pressing need to provide--now--for the future. Approximately \$240 million dollars, at today's prices, will have had to be converted into acceptable facilities prior to the Fall of 1972 if the higher education needs of Indiana's youth are to have been met. Delays in appropriations will result in increased dollars due to the normally expected inflationary trends in the costs of construction. Likewise, sufficient "lead time" for planning and construction of new facilities, and the rehabilitation and alteration of present facilities is most imperative, if the undesirable affects of short-range planning, resulting in crises and emergency solutions, are to be avoided.

Of this \$240 million total, approximately 77 per cent would be allocated for new construction to provide additional facilities and to replace over 600,000 square feet of temporary World War II and pre-war facilities considered unsafe and/or too expensive for proper rehabilitation. In addition, 5 per cent is requested for alteration of obsolete facilities in existing satisfactory structures; 3 per cent for rehabilitation to provide adequate lighting, ventilation, etc., in acceptable, but older facilities; 13 per cent for utilities to include power, heat, light, water, distribution systems, etc.; and 2 per cent for land acquisition. If the above monies are budgeted, less than 100 square feet of useable space will have been provided per student for the proper conduct of his academic pursuits. At the same time the student will have been paying for more than 150 square feet of residential, recreational, and health facilities as a part of his room and board fees.

The ability to adequately plan for the future is so tied to legislative appropriations that this ten year plan of action was considered most essential to the proper conduct of University and College affairs, and was, therefore, presented as a whole in place of biennial parts. Likewise, adequate biennial plans are necessary to minimize the lead time required for the allocation of funds, detail architectural planning, awarding of contracts, construction, occupancy, and alteration of vacated facilities in order to meet the anticipated needs of the future. Funds are required now for the future if long-range planning objectives are to be effectively realized.

PROCEDURES FOR CALCULATING AND DISTRIBUTING CAPITAL FUNDS
AMONG INDIANA'S FOUR STATE SUPPORTED INSTITUTIONS OF
HIGHER EDUCATION THROUGH THE YEAR 1972-1973

For each institution in the study:

A. CLASSIFY AND DEFINE DATA

1. Departments: Academic, overhead or excluded
2. Buildings: Demolish, alter, remodel or satisfactory
3. Space: Classroom, laboratory, office, etc.
4. Staff: Academic, admin., clerical, service, etc.
5. Students: Grad, undergrad, law, etc.

B. COLLECT DATA AS OF 1 OCTOBER

1. Student contact hours by department and/or subject field
2. Full-time equivalent staff by department
3. Student enrollment
4. Space inventory by department and building
5. Quality analysis of buildings
6. Library DATA - Numbers of bound volumes by location

C. FORECAST ENROLLMENT AS OF 1 OCTOBER 1972

D. DEVELOP APPROPRIATE SPACE-FACTORS AND ENROLLMENT RATIOS

E. CALCULATE SPACE REQUIREMENTS THROUGH THE YEAR 1972 USING APPROPRIATE RATIOS AND SPACE FACTORS

F. SUBTRACT FROM 1972 SPACE REQUIREMENTS THE SPACE AVAILABLE AS OF 1 OCTOBER EXCEPT FOR BUILDINGS TO BE DEMOLISHED

(Areas in buildings to be demolished not included)

G. CALCULATE DOLLARS FOR NEW CONSTRUCTION

1. Convert from assignable square feet to gross square feet
(Gross square feet = 1.67 times assignable square feet)
2. Convert gross area to dollars (\$28.06 per gross square foot - adjusted to 1964 New Construction Project Cost.)

H. ADD TO THIS AMOUNT DOLLARS FOR ALTERATIONS

75% of New Construction Contract Costs times Gross Area of Alterations -
(75% of \$23.36 per gross sq. ft. - adjusted to 1964 New Construction Contract Cost.)

I. ADD TO THIS AMOUNT DOLLARS FOR REHABILITATION

50% of New Construction Contract Costs times Gross Area of Rehabilitation -
(50% of \$23.38 per gross sq. ft. - adjusted to 1964 New Construction Contract Cost.)

PROCEDURES FOR CALCULATING AND DISTRIBUTING CAPITAL FUNDS
(Continued)

J. ADD AMOUNT FOR UTILITY DISTRIBUTIONS SYSTEMS AND POWER PLANT CONSTRUCTION -
To be determined by Consultants, or Physical Plant Professional Engineering.

K. ADD AMOUNT FOR LAND ACQUISITION

(Land coverage by buildings should be limited to an average of 20% of gross land area, in order to ensure adequate light, air and spaciousness appropriate to the campus.)

L. SUBTRACT FUNDS AVAILABLE FOR NEW CONSTRUCTION (ANY APPROPRIATED BUT UNSPENT BALANCES NOT ACCOUNTED FOR IN CURRENT INVENTORY OF FACILITIES)

This is the total funds required for new construction at 1964 price levels, but not adjusted for price level variations which may result by 1972-73.

M. SUM ABOVE AMOUNTS FOR GRAND TOTAL

The completion of these steps will provide each institution's total dollars for capital appropriations, through the year 1972.

N. TO CALCULATE THE PERCENTAGE DISTRIBUTION, ADD ALL FOUR SCHOOLS' DOLLARS TOGETHER AND COMPUTE THE PERCENTAGE FOR EACH INSTITUTION.

NOTE: For each biennium an adjustment for inflationary costs of construction must be made. (An estimated 3 Index Points per year. The construction costs index used is the one published in the F. W. Dodge Reports.)

8 June 1964 (Rev.)
JFB/WCS

STANDARD CLASSROOM LAYOUT --- TYPE A

TOTAL SQUARE FEET*
(SQ. FT. PER STATION IN PARENTHESES)

PEDESTAL-MOUNT TABLET-ARM CHAIRS WITH MULTIPLE AISLES

1. 10'-0" from front wall to back of first chair.
2. Chairs spaced from 2'-8" to 2'-10" back-to-back, and on 3'-0" centers laterally.
3. 3'-9" from right wall to center of right chair; 2'-6" from left wall to center of left chair.
4. Cross aisle if more than 7 chairs long, or if more than 1 door.
5. Chalkboards on front and right walls.

WIDTH OF ROOM	NO. OF CHAIRS	NO. OF FEET(MIN.) 12 $\frac{1}{4}$ 15 $\frac{1}{4}$ 18 $\frac{1}{4}$ 21 $\frac{1}{4}$ 24 $\frac{1}{4}$ 27 $\frac{1}{4}$ 30 $\frac{1}{4}$ 33 $\frac{1}{4}$ 36 $\frac{1}{4}$ 39 $\frac{1}{4}$									
		3	4	5	6	7	8	9	10	11	12
<u>LENGTH OF ROOM</u>											
NO. OF CHAIRS	MIN.&MAX.										
1	10'- 6"	129 (42.9)	160 (40.0)	192 (38.3)	223 (37.2)	255 (36.4)	286 (35.8)	318 (35.3)	349 (34.9)	381 (34.6)	412 (34.3)
2	13'- 2"	162 (27.1)	202 (25.3)	242 (24.2)	282 (23.5)	321 (23.0)	361 (22.6)	401 (22.3)	441 (22.0)	480 (21.8)	520 (21.7)
3	15'-10"	196 (21.8)	244 (20.3)	292 (19.5)	340 (18.9)	388 (18.5)	436 (18.2)	484 (17.9)	532 (17.7)	580 (17.6)	628 (17.4)
4	18'- 6"	230 (19.1)	285 (17.9)	342 (17.1)	398 (16.6)	455 (16.2)	511 (16.0)	567 (15.8)	623 (15.6)	680 (15.4)	736 (15.3)
5	21'- 2"	263 (17.6)	328 (16.4)	392 (15.7)	457 (15.2)	521 (14.9)	586 (14.6)	650 (14.5)	715 (14.3)	779 (14.2)	844 (14.1)
6	23'-10"	297 (16.5)	370 (15.4)	443 (14.8)	515 (14.3)	588 (14.0)	661 (13.8)	734 (13.6)	806 (13.4)	879 (13.3)	952 (13.2)
7	26'- 6"	331 (15.8)	412 (14.7)	493 (14.1)	574 (13.7)	655 (13.4)	736 (13.1)	817 (13.0)	898 (12.8)	979 (12.7)	1060 (12.6)
8**	32'- 2"	401 (16.7)	499 (15.6)	598 (14.9)	696 (14.5)	794 (14.2)	892 (13.9)	991 (13.8)	1089 (13.6)	1187 (13.5)	1285 (13.4)
9**	34'-10"	435 (16.1)	541 (15.0)	648 (14.4)	754 (14.0)	861 (13.7)	967 (13.4)	1074 (13.3)	1180 (13.1)	1287 (12.9)	1393 (12.9)
10**	37'- 6"	469 (15.6)	583 (14.6)	698 (14.0)	813 (13.5)	928 (13.3)	1042 (13.0)	1157 (12.9)	1272 (12.7)	1387 (12.6)	1501 (12.5)
11**	40'- 2"	502 (15.2)	625 (14.2)	748 (13.6)	871 (13.2)	994 (12.9)	1117 (12.7)	1240 (12.5)	1363 (12.4)	1486 (12.3)	1603 (12.2)
12**	42'-10"	536 (14.9)	667 (13.9)	798 (13.3)	930 (12.9)	1061 (12.6)	1192 (12.4)	1323 (12.3)	1455 (12.1)	1586 (12.0)	1717 (11.9)

* Based on mid-point of listed range length.

** Dimensions allow for cross aisle.

Sept. 1956

STANDARD CLASSROOM LAYOUT -- TYPE B

TOTAL SQUARE FEET
(SQ. FT. PER STATION IN PARENTHESES)

CONVENTIONAL ARRANGEMENT OF TABLET-ARM CHAIRS IN SOLID ROWS

1. 10'-0" from front wall to backs of chairs in first row.
2. Chairs spaced 3'-0" back-to-back and on 2'-0" centers laterally.
3. a) Less than 7 chairs wide: 6'-0" total aisle, measured from center of chair.
b) 7 or more chairs wide: 8'-0" total aisle, measured from center of chair.
4. Chalkboards on front and right walls.

WIDTH NO. OF OF CHAIRS FEET	5	6	7	8	9	10	11	12	13	14	
ROOM (MINIMUM)	14	16	18	22	24	26	28	30	32	34	
<u>LENGTH OF ROOM</u>											
<u>NO. OF FEET*</u>											
4	22	308 (15.4)	352 (14.7)	396 (14.1)	484 (15.1)	528 (14.7)	572 (14.3)	616 (14.0)	660 (13.8)	704 (13.5)	748 (13.4)
5	25	350 (14.0)	400 (13.3)	450 (12.9)	550 (13.8)	600 (13.3)	650 (13.0)	700 (12.7)	750 (12.5)	800 (12.3)	850 (12.1)
6	28	392 (13.1)	448 (12.4)	504 (12.0)	616 (12.8)	672 (12.4)	728 (12.1)	784 (11.9)	840 (11.7)	896 (11.5)	952 (11.3)
7	31	434 (12.4)	496 (11.8)	558 (11.4)	682 (12.2)	744 (11.8)	806 (11.5)	868 (11.3)	930 (11.1)	992 (10.9)	1054 (10.8)
8	34	476 (11.9)	544 (11.3)	612 (10.9)	748 (11.7)	816 (11.3)	884 (11.1)	952 (10.8)	1020 (10.6)	1088 (10.5)	1156 (10.3)
9	37**	518 (11.5)	592 (11.0)	666 (10.6)	814 (11.3)	888 (11.0)	962 (10.7)	1036 (10.5)	1110 (10.3)	1184 (10.1)	1258 (10.0)
10	40**	560 (11.2)	640 (10.7)	720 (10.3)	880 (11.0)	960 (10.7)	1040 (10.4)	1120 (10.2)	1200 (10.0)	1280 (9.8)	1360 (9.7)
11	43**	602 (10.9)	688 (10.4)	774 (10.1)	946 (10.8)	1032 (10.4)	1118 (10.2)	1204 (10.0)	1290 (9.8)	1376 (9.6)	1462 (9.5)
12	46**	644 (10.7)	736 (10.2)	828 (9.9)	1012 (10.5)	1104 (10.2)	1196 (10.0)	1288 (9.8)	1380 (9.6)	1472 (9.4)	1564 (9.3)
13	49**	686 (10.6)	784 (10.1)	882 (9.7)	1078 (10.4)	1176 (10.1)	1274 (9.8)	1372 (9.6)	1470 (9.4)	1568 (9.3)	1666 (9.2)
14	52**	728 (10.4)	832 (9.9)	936 (9.6)	1144 (10.2)	1248 (9.9)	1352 (9.7)	1456 (9.5)	1560 (9.3)	1664 (9.1)	1768 (9.0)

* Deduct 2'-6" (for absence of aisle across center or rear) if not more than 7 chairs wide or if only one door.

** The floor behind the 8th row should slope, i.e., step, upward.

Sept. 1956

STANDARD CLASSROOM LAYOUT - TYPE C

TOTAL SQUARE FEET
(SQ. FT. PER STATION IN PARENTHESES)

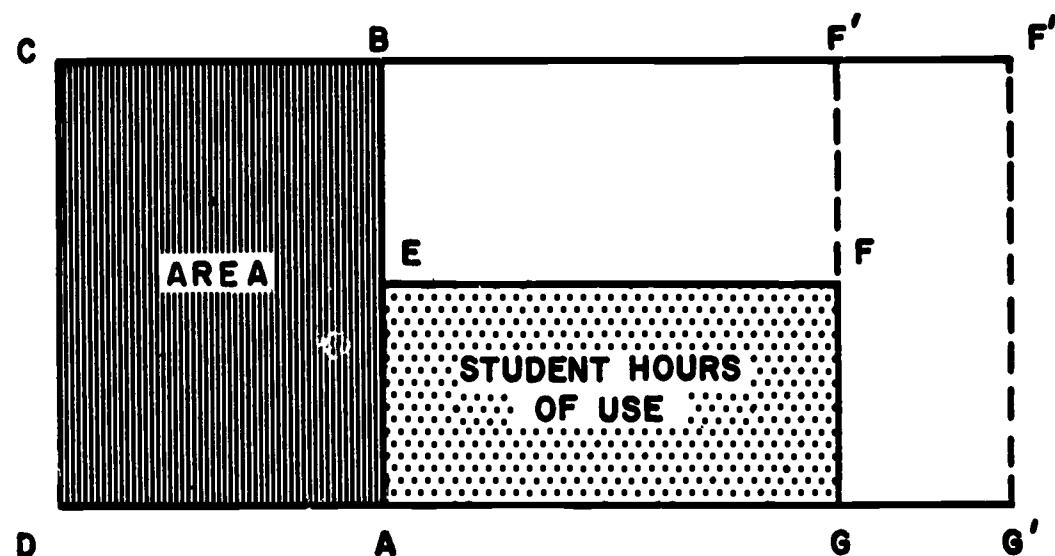
CONVENTIONAL ARRANGEMENT OF TABLET-ARM CHAIRS IN SOLID ROWS

1. 10'0" from front wall to backs of chairs in first row.
2. Chairs spaced 3'0" back to back and on 2'0" centers laterally.
3. 6" from back of last row of chairs to the rear wall.
4. a) Less than 7 chairs wide: 6'0" total aisle, measured from center of chair
b) 7 or more chairs wide: 8'0" total aisle, measured from center of chair.
5. Chalkboards on front walls only.

WIDTH OF ROOM	COL. CHRS.	5	6	7	8	9	10	11	12	
		FEET	14	16	18	22	24	26	30	
LENGTH OF ROOM										
ROWS FEET										
CHAIRS (<u>+0' 6"</u>)										
4	19'6"		273 (13.6)	312 (13.0)	351 (12.5)	429 (13.4)	468 (13.0)	507 (12.7)	546 (12.4)	585 (12.2)
5	22'6"		315 (12.6)	360 (12.0)	405 (11.6)	495 (12.4)	540 (12.0)	585 (11.7)	630 (11.5)	675 (11.3)
6	25'6"		357 (11.9)	408 (11.3)	459 (10.9)	561 (11.7)	612 (11.3)	663 (11.1)	714 (10.8)	765 (10.6)
7	28'6"		399 (11.1)	456 (10.8)	513 (10.5)	627 (11.2)	684 (10.9)	741 (10.6)	798 (10.4)	855 (10.2)
8	31'6"		441 (11.0)	504 (10.5)	567 (10.1)	693 (10.8)	756 (10.5)	819 (10.2)	882 (10.0)	945 (9.9)

COMPOSITE AND ELEMENTAL SPACE MEASURES

CHART A



A. SPACE FACTOR-COMPOSITE MEASURE OF SPACE

Area (square feet) per student hours of use (ABCD/AEFG)

B. ELEMENTAL MEASURES OF SPACE

1. Square feet per station (AD)
2. Hours of room use (AG)
3. Station occupancy

a. Percent station use for a particular hour of use: $\frac{AE}{AB} \times 100\%$

b. Percent station use, when room is in use:

$$\frac{AEFG}{ABF'G} \times 100\% = \frac{\text{student hours of use}}{\text{student station hours available when room in use}} \times 100\%$$

c. Percent station use, total

$$\frac{AEFG}{ABF''G} \times 100\% = \frac{\text{student hours of use}}{\text{total student station hours available for use}} \times 100\%$$

C. DESCRIPTION OF GRAPH.

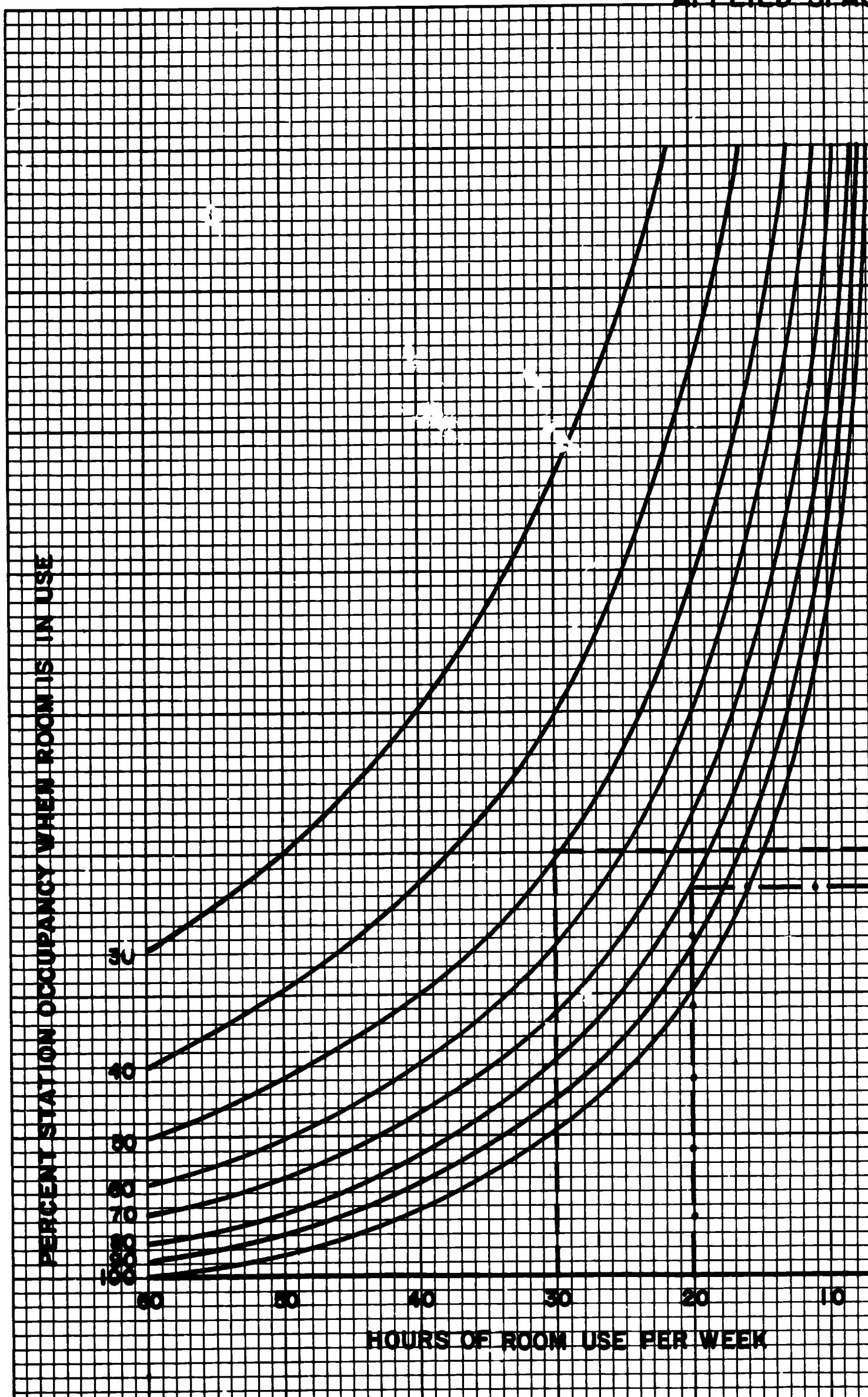
1. AB = number of student stations available in the room.
2. AD = square feet per student station available in the room.
3. ABCD = AB x AD = net area of the room.
4. AE = number of student stations in use.
5. AG = number of room hours of use.
6. AEFG = AE x AG = student hours of use.
7. ABF'G = number of student station hours available, when the room is in use.
8. AG' = total number of room hours available for use.
9. ABF''G' = total number of student station hours available for use.

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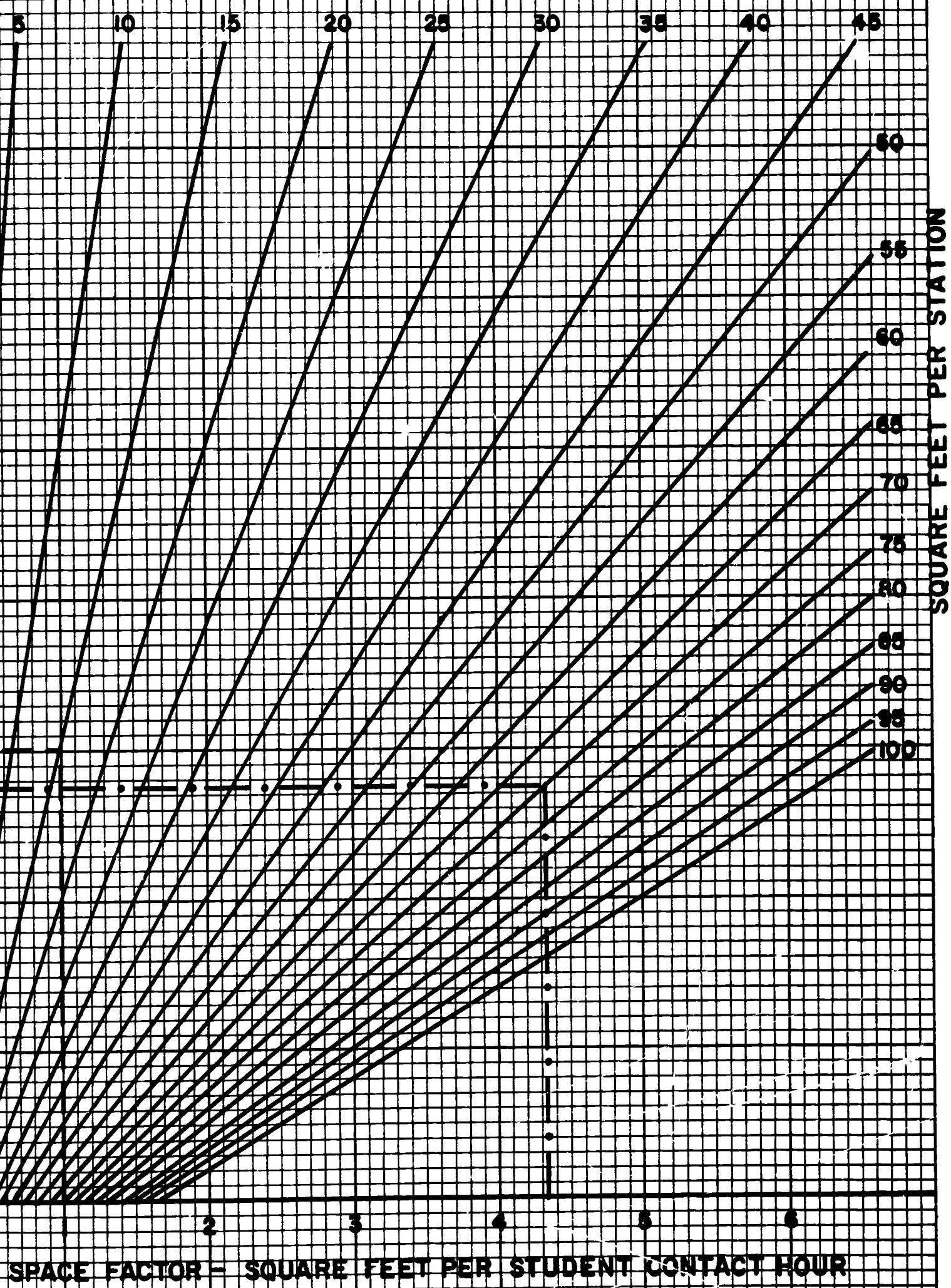
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UTILIZATION MEASURES

ART. B

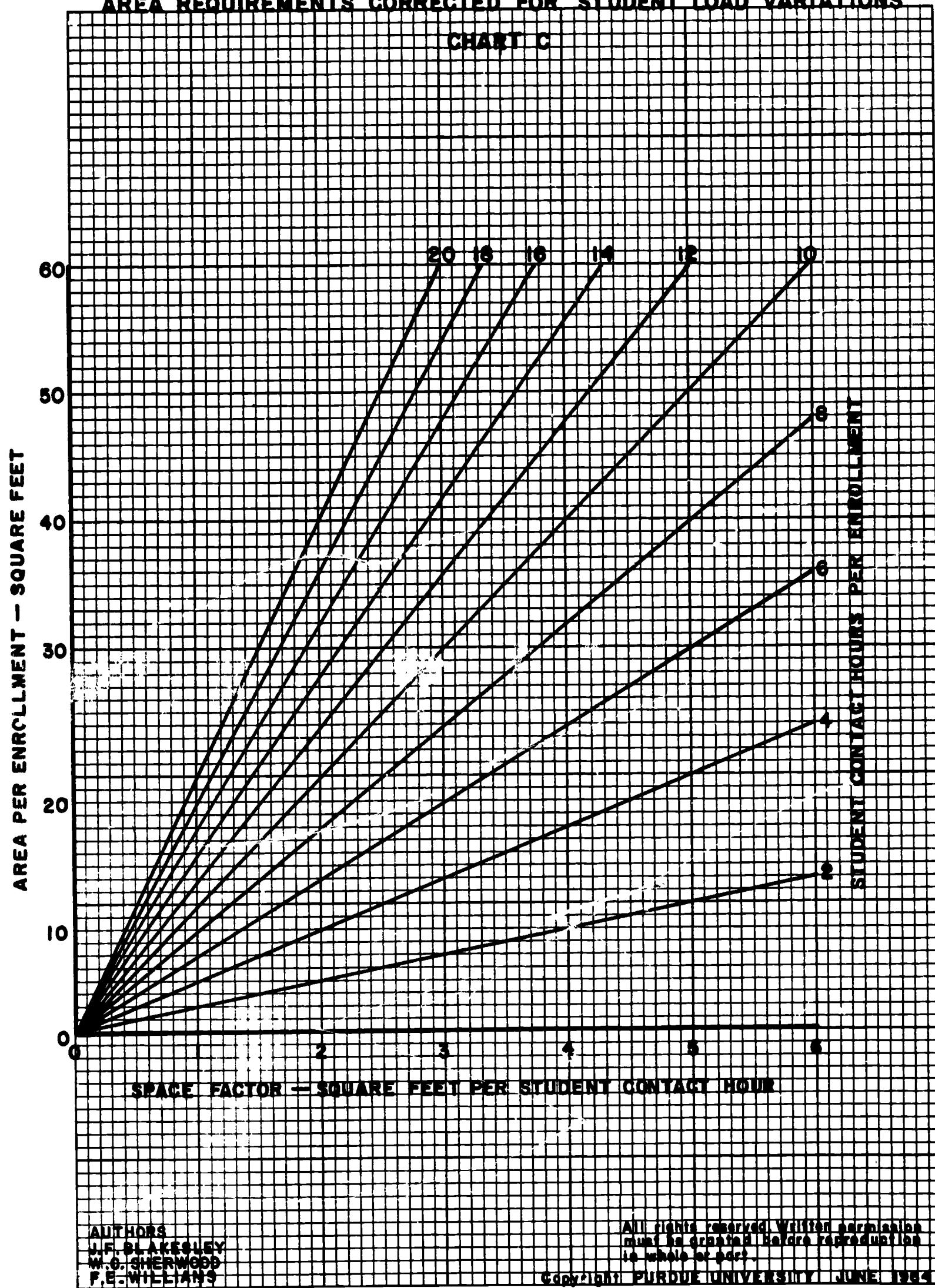


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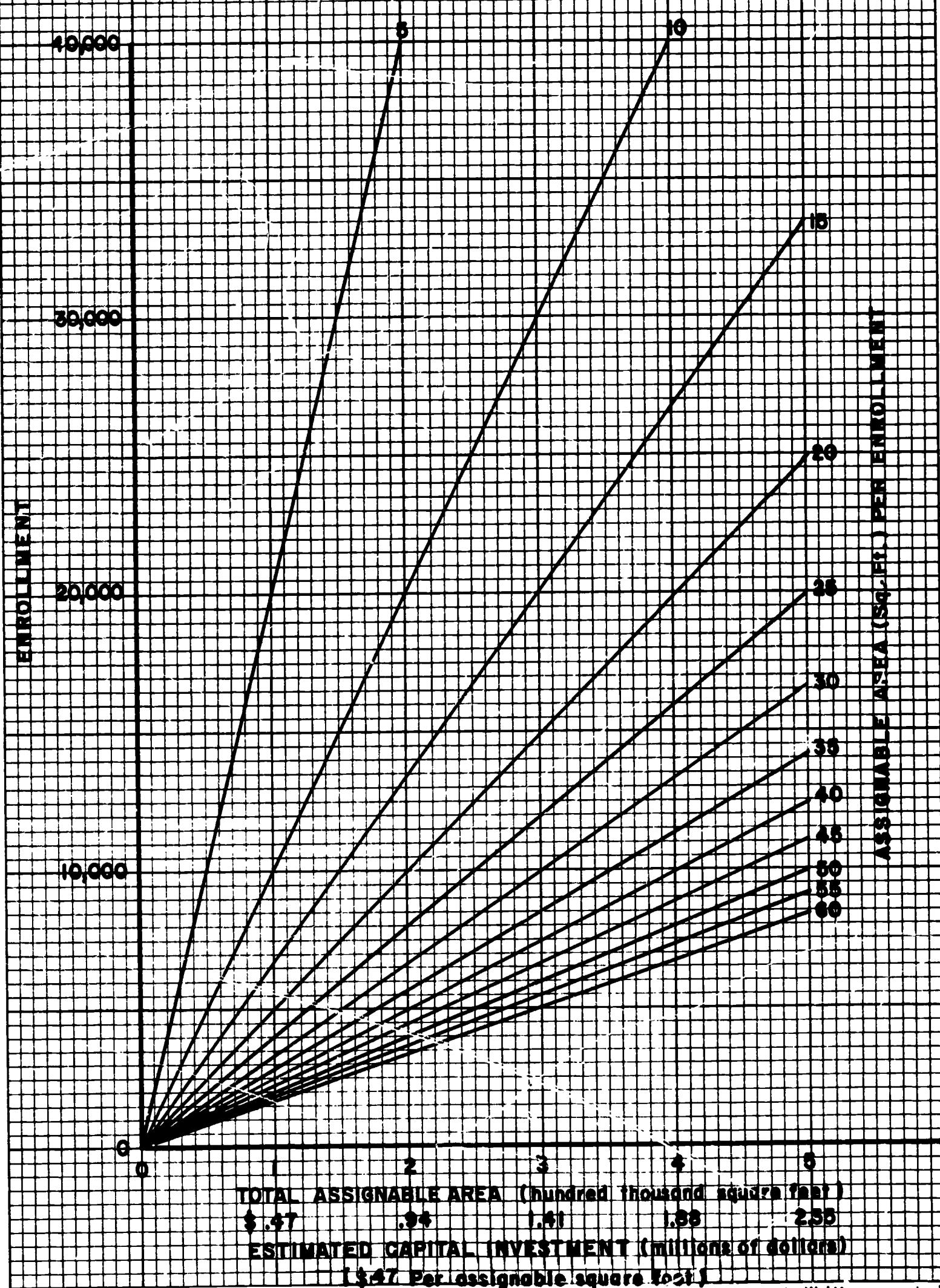
AREA REQUIREMENTS CORRECTED FOR STUDENT LOAD VARIATIONS

CHART C



POTENTIAL ENROLLMENT CAPACITY AND/OR TOTAL AREA REQUIREMENTS

CHART D



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SPACE FACTORS*

<u>TYPE SPACE</u>	<u>SPACE FACTOR</u>	<u>USE LEVEL</u>
[A] Classrooms Seminar Rooms Auditoriums Auditorium Service	One (1) square foot per student contact hour requiring type [A] space.	15 sq. ft. per station. 30 hours of room use. 50 per cent station use.
[B] Teaching Laboratories Teaching Lab. Service Armory Armory Service	Four and one half (4.5) square feet per student contact hour requiring type [B] space.	67.4 sq. ft. per station. 20 hours of room use. 75 per cent station use. (Basically same use as for type [A] space but 4.5 times the area per station).
[C] Music Practice	One and eight-tenths (1.8) square feet per student contact hour requiring type [C] space.	72 sq. ft. per station. 40 hours of room use. 100 per cent station use.
[D] Music Studio	Twelve and four tenths (12.4) square feet per student contact hour requiring type [D] space.	248 sq. ft. per station. 20 hours of room use. 100 per cent station use.
[E] Gymnasium Gymnasium Service	Fifteen and seven tenths (15.7) square feet per student contact hour requiring type [E] space.	157 sq. ft. per station. 20 hours of room use. 50 per cent station use.
[F] Library 1. Study Hall 2. Stack 3. Carrel 4. Library Science 5. Museum Museum Service	Three and five tenths (3.5) square feet for each undergraduate, graduate, and law student enrolled.	15 sq. ft. per station. 25 per cent of student body using the facility at any one time.
	One tenth (0.1) square foot per bound volume.	
	Three and five tenths (3.5) additional square feet for each law and graduate student enrolled.	15 sq. ft. per station. 25 per cent of law and graduate enrollment using carrel space at any one time.
	Thirty two (32) per cent of the sum of the calculated Study Hall and Carrel areas.	
	One (1) per cent of the total academic space.	

<u>TYPE SPACE</u>	<u>SPACE FACTOR</u>
[G] Research Laboratory	Square feet of assignable space per FTE
Research Service	"professional academic" staff grouped by
Animal Quarters	subject field research classification.
Greenhouse	(see below)
 Research Classifications	
• • • • • • • • • • • •	
Administrative Units	0
Social Sciences & Humanities	10
Behavioral Sciences requiring Laboratories	100
Engineering and Physical Sciences	300
Life Sciences	600
[H] Office	One hundred twenty (120) square feet of assignable space per FTE staff requiring office space.
[I] Office Service	Sixteen (16) square feet of assignable space per FTE staff requiring office space.
[J] Conference Commons	Four (4) square feet of assignable space per FTE staff requiring office space.
[K] Storage	Two (2) per cent of the total academic space.
[L] Shop	Included as part of Research Service if it is utilized for instruction and research, otherwise it will be included in Administrative Overhead.

*These factors were developed in cooperation with Mr. Edward Bocko, Indiana State College; Mr. Phillip Canklin, Ball State Teachers College; and Dr. William Fuller, Indiana University.

Example of Space Factor Development
(See Chart A)

MUSIC PRACTICE SPACE FACTOR

Alternative I.

A. Include only normal daytime student contact hours (Practice Hours) required to obtain credit for the course.

ELEMENTS

1. 100% Station Utilization - since most music practice rooms have only one (1) station and therefore, they have either zero (0) or 100 per cent station utilization at any one hour.
2. Forty (40) hours per week room use.
3. Seventy-two (72) square feet per station.

Composite Space Factor Calculation

$$\frac{72 \text{ sq. ft.}}{40 \text{ hrs. use}} \cdot 100\% = 1.8 \text{ square feet/student contact hour}$$

Alternative II

A. Same as A above.

B. Include both normal daytime and evening student contact hours (practice hours) required to obtain credit for the course.

ELEMENTS

1. Same as A₁ above.
2. Sixty (60) hours per week room use.
3. Same as A₃ above.

Composite Space Factor Calculation

$$\frac{72 \text{ sq. ft.}}{60 \text{ hrs. use}} \cdot 100\% = 1.2 \text{ square feet/student contact hour}$$

Presently, the space factor for Music Practice Rooms is as set out above under "Alternative I". If consideration is to be given to a change in the accounting of student contact hours to include evening hours, (practice hours) for music practice rooms, then the space factor should be revised as set out above under "Alternative II".

PURDUE UNIVERSITY
SPACE PROJECTIONS

	1963 Fall Data	1963 Space Factor	1963 Space Calculation	1963 Space Inventory	1963 Difference	1963 Projection Ratio	1972 Space Calculation
A Classrooms	224,769	1.0	224,769	218,192	(6,577)		
B Teaching Labs	85,516	4.5	384,822	432,841	(48,019)		
C Music Practice		1.2					
D Music Studio		12.4					
E Gym	7,529	15.7	118,205	64,355	(53,850)		
F1 Office (Except CES)	3,083.1	140.0	431,648				
F2 Office CES	197.1	140.0	27,594				
Sub Total F1 & F2			459,242	416,838	(42,404)		
G1 Research - 0	142.7	0.0					
	677.7	10.0					
	105.2	100.0					
	922.6	300.0					
	465.1	600.0					
Total G1 Research			571,967				
G2 Research (CES)							
	7.4	0.0					
	94.5	10.0					
	4.0	100.0					
	14.1	300.0					
		600.0					
Total G2 Research			5,575				
Total Research			577,542	549,235	(28,307)		
Total A-G Except F2 & G2			1,731,411	1,681,461	(49,950)		
						1.5621	2,704,464

CRP/WFS
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Purdue University
Space Projections

Page 2

	1963 Fall Data	1963 Space Factor	1963 Space Calculation	1963 Space	1963 Inventory	1963 Difference	Projection Ratio	1972 Space Calculation
II Library								
1. Study Hall	17,473	—	3.5	61,156	67,319	6,163	1,562 ¹	95,525
2. Carrel	3,600	3.5	12,600	7,770	(4,830)	1,896 ²	23,890	
Sub-Total			73,756	75,089	10,993	119,416	119,416	
3. Library Serv	32% of (II 1 & 2)		23,602	42,354	18,752	32% of (II 1 & 2)	38,213	
4. Stack	535,462 (624,462) .1		53,546	68,240	14,694	2.0	107,092	
Sub-Total H			150,904	185,683	34,779		264,721	
Sub-Total A-II			1,945,484	1,867,144	(48,340)		3,006,334	
I Museum	1% of A - II	19,155		6,298	(12,857)	1% of A - H	30,063	
J Storage	2% of A - H	38,310		55,776	17,466	2% of A - H	60,126	
K Other Space				62,768	62,768			
Total Academic A-K			1,972,949	1,991,986	(19,037)		3,096,523	
L Overhead	12% of A - II	236,754		226,937	9,817	12% of A - H	371,582	
Total A-L			2,209,703	2,218,923	(9,220)		3,468,105	

¹Total estimated enrollment Fall 1972/Total enrollment Fall 1963 (27,294/17,473) = 1.562

²Estimated graduate enrollment Fall 1972/Graduate enrollment Fall 1963 (6,825/3,600) = 1.8958

CRP/WFS
April 8, 1964

CALCULATION OF PURDUE UNIVERSITY
PHYSICAL FACILITY CAPITAL REQUIREMENTS
THROUGH 1972

Estimated Total Enrollment 1972-73	27,294
Estimated Graduate Enrollment 1972-73	6,825
Estimated Overhead Percentage	12%
Fall 1972, Calculated Assignable Area	3,648,105
Less Fall 1963 Inventory, Satisfactory, Alter, or Remodel Academic and Overhead Space	2,026,130
New Construction Required Through 1972	(1,441,975 sq. ft.)
Dollars For New Construction (Area X 1.67 x 28.06 x 100% = \$46.86)	\$67,570,949
Dollars For Alteration (Area X 1.67 x 22.93 x 75% = \$28.72)	(2,594,483 sq. ft.) \$7,452,352
Dollars For Rehabilitation (Area X 1.67 x 22.93 x 50% = \$19.15)	(308,572 sq. ft.) \$5,908.228
Dollars For Utilities	\$17,049,250
Dollars Expended Adjusted Dollars Available (1.06167)	\$2,521,030 \$15,424,175
SUB TOTAL	\$96,355,704
Less Dollars Made Available to July 1965 and Not Represented in Inventory and Utilities	.
GRAND TOTAL - Capital Requirements in Terms of 1964 Dollars	\$7,132,400 \$89,223,304*

* This is roughly 10 million dollars each year (at 1964 price levels) for each of the next eight years.

1 June 64
WCS

PURDUE UNIVERSITY
OFFICE OF THE REGISTRAR

PRELIMINARY ENROLLMENT REPORT FOR FIRST SEMESTER 1963-1964

FINAL REPORT
LAFAYETTE CAMPUS

CURRICULUM	FRESHMAN		SOPHOMORE		JUNIOR		SENIOR		9 OTHER	TOTAL
	1	2	3	4	5	6	7	8		
AVIATION ELECTRONICS TECHNOLOGY										
SINGLE MEN	17	2	7	3						29
MARRIED MEN		2	1		1					4
TOTAL	19	3	7	4						33
AVIATION MAINTENANCE TECHNOLOGY										
SINGLE MEN	43	13	40	18						114
MARRIED MEN		2	1	2	1					6
TOTAL	45	14	42	19						120
INDUSTRIAL ILLUSTRATION TECHNOLOGY										
SINGLE MEN	18	17	15	4						54
SINGLE WOMEN					1					1
MARRIED MEN		1	2	2						5
TOTAL	18	18	17	7						60
NURSING TECHNOLOGY										
SINGLE WOMEN	24									24
MARRIED WOMEN	5									5
TOTAL	29									29
PROFESSIONAL PILOT TRAINING										
SINGLE MEN	9		7	1						17
MARRIED MEN	5		3							8
TOTAL	14		10	1						25
TOTAL TECHNOLOGY										
SINGLE MEN	78	41	62	32	1					214
SINGLE WOMEN	24			1						25
MARRIED MEN	4	8	4	7						23
MARRIED WOMEN	5									5
TOTAL	111	49	66	40	1					267
FRESHMAN ENGINEERING										
SINGLE MEN	1316	57	376	39	24	1				1813
SINGLE WOMEN	14		1							15
MARRIED MEN	59	21	15	6	5		2			108
TOTAL	1389	78	392	45	29	1	2			1936
AERONAUTICAL ENGINEERING										
SINGLE MEN		50	17	42	25	40	15	8		197
SINGLE WOMEN		2				1				3
MARRIED MEN			5	4	3	4	5	2		23
TOTAL		52	22	46	28	45	20	10		223

	1	2	3	4	5	6	7	8	9	OTHER	TOTAL
AGRICULTURAL ENGINEERING											
SINGLE MEN	10	3	15	3	6	1	3				41
MARRIED MEN	1		2	1	1	2	3				10
TOTAL	11	3	17	4	7	3	6				51
CHEMICAL ENGINEERING											
SINGLE MEN	55	13	68	51	66	33	6				292
SINGLE WOMEN				2							2
MARRIED MEN	1	1	6	4	9	7	1				29
TOTAL	56	14	74	57	75	40	7				323
CIVIL ENGINEERING											
SINGLE MEN	51	34	75	49	64	33	11				317
SINGLE WOMEN	1			1							3
MARRIED MEN		6	9	14	13	11	2				55
TOTAL	52	40	84	64	77	44	14				375
ELECTRICAL ENGINEERING											
SINGLE MEN	1	169	50	190	119	171	74	19			793
MARRIED MEN	37	7	44	38	73	27	5				231
MARRIED WOMEN			1								1
TOTAL	1	206	57	235	157	244	101	24			1025
ENGINEERING SCIENCES											
SINGLE MEN	17	6	20	16	16	22	1				98
SINGLE WOMEN				2	2	2	2				2
MARRIED MEN			2	2	2	2					8
TOTAL	17	6	22	18	20	24	1				108
INDUSTRIAL ENGINEERING											
SINGLE MEN	22	22	44	21	30	18	4				161
SINGLE WOMEN	1		1								2
MARRIED MEN	3		4	3	5	5	3				23
MARRIED WOMEN			1		1	1					1
TOTAL	26	22	49	24	35	24	7				187
MECHANICAL ENGINEERING											
SINGLE MEN	118	65	176	89	140	35	20				643
SINGLE WOMEN				1							1
MARRIED MEN	4	7	8	13	25	16	6				79
TOTAL	122	72	184	103	165	51	26				723
METALLURGICAL ENGINEERING											
SINGLE MEN	5	3	22	9	10	7	2				58
MARRIED MEN	1	1	1		3						6
MARRIED WOMEN			1								1
TOTAL	6	4	24	9	13	7	2				65
TOTAL ENGINEERING											
SINGLE MEN	1316	58	873	252	676	383	543	238	74		4413
SINGLE WOMEN	14		5		1	4	3		1		28
MARRIED MEN	59	21	62	33	85	78	137	75	22		572
MARRIED WOMEN				2			1				3
TOTAL	1389	79	940	285	764	465	683	314	97		5016

	1	2	3	4	5	6	7	8	9	OTHER	TOTAL
AGRICULTURE											
SINGLE MEN	261	20	271	38	175	32	146	19	15		977
SINGLE WOMEN	21		17	1	7		3				49
MARRIED MEN	5	3	14	5	14	10	31	7	12		101
MARRIED WOMEN				1	1						2
TOTAL	287	23	302	45	197	42	180	26	27		1129
FORESTRY											
SINGLE MEN	48	8	33	11	31	10	19	8			168
SINGLE WOMEN		1		1							2
MARRIED MEN	1	1	3	3			4		2		14
TOTAL	49	10	36	15	31	10	23	10			184
HOME ECONOMICS											
SINGLE MEN	7	8	7	3	5	2	7	1			40
SINGLE WOMEN	202	27	154	38	141	13	111	20			706
MARRIED MEN				1		1	1	1			4
MARRIED WOMEN		3	9	2	4	3	12	7			40
TOTAL	209	38	170	44	150	19	131	29			790
HUMANITIES, SOCIAL SCIENCE, + EDUCATION											
SINGLE MEN	187	62	275	124	291	83	203	57	37		1319
SINGLE WOMEN	427	25	416	55	433	42	250	15	12		1675
MARRIED MEN	4	6	8	18	22	22	54	15	12		161
MARRIED WOMEN	9	11	6	27	24	11	33	13	1		135
TOTAL	627	104	765	224	770	159	540	100	62		3291
INDUSTRIAL EDUCATION											
SINGLE MEN	14	23	21	37	35	28	23	14	8		203
SINGLE WOMEN							1	1			2
MARRIED MEN	4	2	3	4	13	14	15	15	1		71
TOTAL	18	25	24	41	48	42	39	30	9		276
INDUSTRIAL MANAGEMENT											
SINGLE MEN					35	48	81	26	8		198
MARRIED MEN					4	5	19	9	3		40
TOTAL					39	53	100	35	11		238
PHARMACY											
SINGLE MEN			61	8	70	12	74	9	1		243
SINGLE WOMEN			27		27	1	22	1			78
MARRIED MEN			1	1	4	3	16	4	2		31
MARRIED WOMEN					1		3				4
TOTAL			89	9	110	16	115	14	3		356
PHYSICAL EDUCATION FOR MEN											
SINGLE MEN	40	6	33	10	45	8	34	7	6		189
MARRIED MEN	1	2	6	1	8	5	15	5	4		47
TOTAL	41	8	39	11	53	13	49	12	10		236
SCIENCE											
SINGLE MEN	351	26	215	42	233	43	153	33	24		1120
SINGLE WOMEN	218	7	120	15	103	11	59	4	2		539
MARRIED MEN	2	2	4	4	12	13	25	10	6		78
MARRIED WOMEN	2	2	2	2	8	3	3	2	2		26
TOTAL	573	37	341	63	356	70	240	49	34		1763

ENROLLMENT PROJECTIONS *

Purdue University (Lafayette Campus)

Fall Semester Projections

Fall Semester	Freshmen	Sophomore	Junior	Senior	Graduate	Total
1962	4016	4200	3144	2507	3305	17,172**
1963	3982	3505	3416	2972	3600	17,475**
1964	5083	3465	2963	3478	3925	18,914
1965	5709	4319	2847	2903	4250	20,028
1966	5507	4865	3565	2790	4550	21,277
1967	5617	4783	4023	3493	4850	22,766
1968	5577	4775	3870	3942	5175	23,339
1969	6037	4736	3948	3792	5550	24,063
1970	6243	5136	3915	3869	5950	25,113
1971	6311	5313	4251	3738	6375	25,988
1972	6535	5369	4400	4165	6825	27,294

Composite Projections ***

Academic Year	Freshmen	Sophomore	Junior	Senior	Graduate	Total
1963-64	3985	3583	3745	2987	4462	18,762
1964-65	4922	3446	3127	3568	4850	19,913
1965-66	5514	4294	3006	2978	5225	21,017
1966-67	5326	4837	3761	2862	5613	22,399
1967-68	5435	4750	4244	3582	5975	23,986
1968-69	5398	4748	4089	4043	6375	24,653
1969-70	5835	4708	4166	3889	6338	25,436
1970-71	6033	5105	4131	3968	7350	26,587
1971-72	6106	5282	4483	3838	7887	27,596
1972-73	6320	5339	4641	4272	8438	29,010

*Does not include Veterinary Science & Medicine

** Actual

*** Composite enrollments are the average of the academic semester or quarters, plus a weighted summer session. These are the figures used in the legislative requests.

PURDUE UNIVERSITY

STUDENT CONTACT HOURS

Department by Type of Room
(First Semester 1963-64)

School and Department	Class-rooms	INCLUDED			EXCLUDED			Ind	Re-search	Study	Enrol	Misc
		Teach	Music	Music Stud	Gym	Total	Even-ing					
<u>Agricultural School</u>												
Agriculture	393					393						
Agricultural Economics	2,083					2,481						
Agri. Engineering	311					867						
Agronomy	1,570					1,331						
Animal Science	1,811					914						
Biochemistry	755					441						
Botany & Plant Pathology	80					216						
Entomology	436					515						
Forestry & Conservation	1,023					999						
Horticulture	316					176						
TOTAL	8,778					5,857						
							14,635					
<u>Schools of Engineering</u>												
Aero & Eng. Sciences	716					30						
Aeronautical Eng.	1,136					360						
Astronautics	168											
Chemical Eng.	2,194					1,138						
Civil Engr.	4,882					12,038						
Electrical Eng.	11,656					7,020						
Freshman Eng.	1,547					76						
E SC Eng. Sciences	5,132					303						
Geology	1,033					1,599						
Industrial Eng.	2,325					2,562						
Mechanical Eng.	6,266					3,068						
							9					
								7				
									46			
										4		

School and Department	Class-room	Teach-Labs	Music-Pract	Music-Stud	Gym	Total	INCLUDED			EXCLUDED		
							Even-ing	Non-Coll	Ind-Study	Enrol	Re-search	Enrol
Schools of Engineering (contd)												
Metalurgical	757	213				970			26	17		
Nuclear Eng.	242	54				296			14	14		
TOTAL	38,054	28,461				66,515			674	345		
School of Science												
Biological Sciences	5,796	7,527				13,323			94	75		
Chemistry	15,230	14,593				29,823				166		
Physics	12,363	5,129				17,492			15	71		
Mathematics	29,877					29,877			109	22		
Statistics	1,416					1,416			4	3		
Computer Sciences	1,036					1,036				3		
TOTAL	65,718	27,249				92,967			222	340		
School of Pharmacy												
Pharmacy Admn.	411	6				417			1			
Pharmacy	938	828				1,766			24			
Bionucleonics	90	87				177			15			
Pharm. Chemistry	858	1,140				1,998			8			
Pharmacology	114	198				312			17			
Pharmacognasy	257	3				260			5			
Physical Pharmacy	54					54						
TOTAL	2,722	2,262										
												4,984
												70

School and Department	INCLUDED				EXCLUDED							
	Class-room	Teach Labs	Music Pract	Music Stud	Gym	Total	Even-ing	Non Coll	Ind Study	Re-search	Enrol	Misc
Military Science												
Air Science	4,816	2,223				7,039						
Military Science	3,973	1,466				5,439						
Naval Science	1,121	982				2,103						
University Band	3,056					3,056						
TOTAL	12,966	4,671				17,637						
School of Industrial Management												
Economics	9,643	90				9,733	69			44	30	
Industrial Mgmt.	5,950	1,404				7,354				314		
TOTAL	15,593	1,494				17,087	69			358	30	
School of Home Economics												
Clothing and Textiles	688	1,100				1,788				28	5	
Equipment & Fam. Hous.	567	262				829				12	1	
Foods & Nutrition	589	1,346				1,935				3	7	
Home Economics	253					253						
Home Mgmt. & Fam. Econ	545	24				569				55	5	
Instit. Management	256	350				606						
TOTAL	2,893	3,082				5,980				98	18	
School of Humanities, Social Science, and Education												
Audio. & Spch. Sci.	1,221	580				1,801				92	13	
Art and Design	1,879	3,212				5,091				46		
Child Dev. & Fam. Life	857	650				1,507				65	2	

School and Department	Class-room	Teach	Music Pract	Music Stud	Gym	Total	Even-ing	Non Coll	Ind Enrol	Re-search	Excluded
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School of Humanities, Social Science, and Education (contd)

English	17,980	2,958				20,938	92		55	2	
Education	5,726	940				6,666	1,017		657	23	
General Studies	2,961	36				2,997					
Hist. Govt. & Phil.	12,952					12,952					
Modern Lang.	13,556	2,690				16,246					
Psychology	7,793	907				8,700	349		139	84	
Sociology	5,334					5,334			33	24	
Speech	5,862	467				6,329			33	12	
Phys. Ed. - Men	1,130					1,613	2,743		8	1	
Phys. Ed. - Women	789					5,316	6,705				
TOTAL	78,040	12,440				7,529	98,009	1,479	1,618	161	

School of Veterinary Science and Medicine

Vet. Anatomy									7	3	1,260
Vet. Microbiology									14	10	2,328
Vet. Phys. & Pharmacology										7	1,655
Vet. Clinics									9	2	2,366
TOTAL									30	22	7,609

Campus Extension

Aviation Technology											
Nursing Technology											
Industrial Technology											
TOTAL											

GRAND TOTAL	224,769	85,516
	7,529	317,748
	1,548	3,648
	3,149	1,315
		7,609

April 17, 1964

Purdue University
Student Contact Hours Internal Reconciliation with
Course Listing by Subject Field
First Semester 1963-64

ITEM	STUDENT CONTACT HOURS			ENROLLMENTS	
	Non Lab	Lab	Total	Indiv. Study	Research
Control Totals from Course Listings by Subject Field	230,253	100,366	330,619	3,149	1,315
Less: Totals per SCH Report	223,769	85,516	310,285	3,149	1,315
Non Collegiate Hours From Campus Extension	1,587	2,061	3,648		
Evening Hours	1,522	26	1,548		
Veterinary School Hours	2,375	5,234	7,609		
Gymnasium Hours	-0-	7,529	7,529		
Balance	-0-	-0-	-0-	-0-	-0-

22 March 64
WCS

Purdue University
Student Contact Hours Reconciliation
With Official Auditor's Report
First Semester 1963-64

<u>ITEM</u>	<u>STUDENT CONTACT HOURS</u>			<u>ENROLLMENTS</u>	
	<u>Non Lab</u>	<u>Lab</u>	<u>Total</u>	<u>Indiv. Study</u>	<u>Research</u>
Totals from Auditor's Final Report	227,436	93,050	320,486	3,118	1,293
Add Items Omitted from Report:					
Nursing Technology	87	174	261		
Technical & Applied Arts	327	1,908	2,235	1	
Veterinary Anatomy	242	1,018	1,260	7	3
Veterinary Microbiology	815	1,513	2,328	14	10
Veterinary Physiol & Pharm	629	1,026	1,655		7
Veterinary Clinics	689	1,677	2,366	9	2
Industrial Tech	28	-0-	28		
GRAND TOTALS	230,253	100,366	330,619	3,149	1,315
CONTROL TOTALS FROM COURSE LISTING	230,253	100,366	330,619	3,149	1,315
BALANCE	-0-	-0-	-0-	-0-	-0-

22 March 64
 WCS

**Purdue University Procedures
For Generating Information
for the Four State School Capital Appropriations Study**

This set of procedures concerns itself with fulfilling two objectives:

1. An alphabetical listing of student registrations within each school or college. This listing will contain the following specific information: (a) student number, (b) student name, (c) student's school or college and classification, (d) students credit hour load. Sub-totals of the number of registrations and credit hours by school and college, and grand totals of the above are to be given.
2. A list of all courses taught within each school or college. This listing will contain the following specific information: (a) the course number, (b) the total number of students enrolled in the course, (c) the number of credit hours granted for the successful completion of the course, (d) the number of lab hours of formal meetings within the course, (e) the number of non-laboratory formal hours of meeting within the course. Sub-totals of the number of credit hours and non-lab and lab student hours by department (the product of the number enrolled times the credit or student hours), and grand totals of the above for each institution are to be given.

This description of the studies that were made will start with the assumption that classes are underway--students are meeting with their instructors, in classrooms and laboratories, and two weeks have gone by so that the instructional program has "settled down" into organized activities that will continue fundamentally unchanged for the remainder of the semester. At this point a snapshot is taken of these activities, and these studies will be based on this snapshot. Since at Purdue, an electronic scheduling process is used, it is quite easy to provide information as of a certain point in time.

The step-by-step procedure for gaining this information concerns:

1. The student's schedule for the semester being studied.
2. A listing of students alphabetically by school.
3. The Registrar's final student enrollment report.
4. The catalog of courses offered for the semester being studied.
5. The class rosters for the semester being studied.
6. A list of all courses taught within each department.

Illustrations and explanations of these reports follow.

1. To give a specific illustration of the procedures developed at Purdue, David Studebaker, a junior in the School of Mechanical Engineering will be representative of a typical student in the study.

Dave is taking five courses for nineteen credit hours and he must be free to work on Saturdays. His schedule follows:

866376	STUDEBAKER DAVID ALAN	M 6 ME	B960	05374		
BLDG.	ROOM	TIME	SUBJ.	COURSE	DIV.	CR.
ME	212	MWF 9.30, TH 1.30-3.20	M E	315	10	4.0
EE	315	T 12.30, W 2.30-5.20	E E	353	2	4.0
EE	254	MW 12.30	E E	353J	1	.0
EE	226	MF 2.30	E SC	312		4.0
CE	201	TTH 10.30	E SC	312J	1	.0
ME	221	MWF 10.30, T 7.30-10.20	M E	370	1	4.0
REC	313	MWF 1.30	C S	400	1	3.0
FREE		S 7.30-12.20	TIME	890	1	.0
						19.0

STUDEBAKER DAVID ALAN

PART A 1ST SEM 63-64

30JULY63

AMT.PAID

2. His schedule along with the other 17,673 student schedules make up a magnetic tape that is produced as a by-product of Purdue's Academic Scheduling System (PASS). This tape is sorted alphabetically by student within each school of the university. From this sorted tape the following list is printed giving totals by school and the complete university including both the number of students and the number of credit hours generated. The total number of credit hours (269,836.0) is a control figure that will be referred to later.

A sample of this list appears in Appendix A. The sample is from the Mechanical Engineering School so that Dave's name may be found. The page containing the ME totals and a page showing the university totals are also included.

3. These totals are then compared to the Registrar's Student Enrollment Report (see Appendix B) which ties in with the number of students in each school who registered and paid fees for the semester being studied.

Note: that the total Mechanical Engineers on this and the preceding report agree (723) as does the grand total for the total university (17,674).

4. To study particular courses, however, it is necessary to find out as much as possible about each course. The starting place for this information is the catalog of courses. This catalog consists of courses that have been approved by the faculty and contains information on how the course is to be taught. Appendix C is an example of some Mechanical Engineering courses.

Since the first course on Dave's schedule was ME 315, a glance at the catalog shows us that ME 315 is a course in Heat and Mass Transfer. It has three class hours, two lab hours for four credit hours. By glancing back at Dave's schedule one may note that indeed he is in ME 315 a total of five hours of which two are consecutive, and that he is receiving four credit hours for this course. A similar example could be checked for ME 370.

Note that usually one hour of class creates one credit hour while two or three hours of lab creates one credit hour. As was stated before credit hours will be used as a control figure in the totals.

5. Now let's reconsider the magnetic tape of student schedules. If from each schedule, like Dave's, a record of each course was made then a new tape could be generated that would contain the same information but instead of 17,674 student records, it would contain five course records for Dave alone, one for each of his courses, or as it turned out 93,342 course records for the 17,674 students in the University. This large tape could then be sorted so that all the course records for each course were together. From this tape the class rosters can be produced. The class rosters for ME 315's 10 divisions are in Appendix D. Note that Dave is listed in division 10 as his schedule indicated. Also the sum of the enrollments in the divisions give a total of 117 students taking the course.

6. Then a summary of this class roster tape containing the number of students in each course and the total credit hours generated by the course could be produced. This summary could then be merged with the information from the catalog to produce the report in Appendix E. The information on the left part of this report comes directly from the catalog. Remember ME 315, which was class three, lab two, for four credit hours? The number of students and number of credit hours came from the summary of the class roster tape discussed above.

The number of class hours is a straight multiplication of the number of students by the catalog information. Note that ME 315 with 117 students has 351 (3×117) non lab hours, 234 (2×117) lab hours for 468 credit hours.

These figures are totaled by department and by total university. Now check and compare the total credit hours 269,836.0 with the total credit hours from the list of students. With this verification, consistancy between the reports is demonstrated. It is hoped that this paper also demonstrated how David Studebaker, our junior ME student is counted into the university totals.

APPENDIX A

PURDUE UNIVERSITY
LAFAYETTE CAMPUS

FIRST SEMESTER 1963 - 1964

LIST OF STUDENTS FOR CAPITAL APPROPRIATIONS STUDY

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CURRICULUM	STUDENT NUMBER	STUDENT NAME	CLASS	CREDIT HOURS
ME	786668	SCHULT THOMAS HEROLD	8	18.0
	790954	SCOTT MELVIN H JR	3	19.0
	792872	SEBACHER RALPH IGNATIUS	7	17.0
	794867	SELLS HARRY EDWARD	5	19.0
	796530	SERGEANT JOHN MARIN	7	16.0
	798881	SHAFFNER GORDON EUGENE	4	17.0
	813049	SIDES DENNIS ARTHUR	3	19.0
	813300	SIEFERT GEORGE JOSEPH	5	18.0
	817165	SIMPSON STEVEN CHARLES	6	18.0
	820446	SKINNER THOMAS JAY	5	16.7
	822602	SLOAN ROBERT ERNEST	5	16.0
	823222	SMALL JAMES ARTHUR	6	19.0
	825513	SMITH DONALD LARRY	3	19.0
	825636	SMITH DOUGLAS OSTER	7	17.0
	828880	SMITH LOWELL WILLIAM	6	16.0
	830075	SMITH RICHARD BRUCE	5	21.0
	832464	SMOLEK LOUIS F JR	6	17.0
	834996	SNYDER LYNN EDWARD	3	19.0
	835181	SNYDER ROBERT RILEY	7	19.0
	836018	SOKOLOWSKI DANIEL E	5	18.0
	837339	SOPER LAWRENCE EDWARD	5	19.0
	840489	SPEAKMAN LARRY DONALD	4	0.0
	841037	SPEICHER WILLIAM ROBERT	3	16.0
	841416	SPENCER BRUCE WARNE	3	17.0
	847815	STANFA CHARLES SHERIDAN	7	18.0
	849622	STARR WAYNE ELLIOTT	6	19.0
	851093	STEDGE ANTHONY MICHAEL	3	16.0
	851139	STEELE EDWARD MC CORD	3	13.0
	852461	STEIER GERALD MICHAEL	4	17.0
	853953	STEPHAN PAUL GLENN JR	3	19.0
	854819	STEPHENSON ROBERT BAIRD	6	19.0
	855091	STERN ALFRED MORRIS	4	19.0
	855249	STERN RONALD WAYNE	8	17.0
	856362	STEVENS TRACY JAY	7	18.0
	858068	STIEFEL ALBERT PAUL	9	20.0
	858562	STILLSON TIMOTHY JAY	5	18.0
	860326	STOKES JOHN ROBERT	8	16.0
	860358	STOKES RICHARD FRANK	7	16.0
	860490	STOLLENMEYER CARL E JR	3	16.0
	861073	STONE TIM ROBERT	5	15.0
	861394	STONER MARVIN GERALD	6	16.0
	863368	STRAUB ROBERT C JR	3	16.0
	863460	STRAUSS ALAN DICKSON	6	18.7
	863466	STRAUSS LOUIS ALLEN	3	17.0
	864530	STRIKIS GUNTIS VIKTORS	7	19.0
→	866376	STUDEBAKER DAVID ALAN	6	19.0
	868425	SUGA KELVIN HISASHI	6	18.7
	875406	TAFF ALBERT EDGAR	5	16.0
	⋮	⋮	⋮	⋮

APPENDIX A

PURDUE UNIVERSITY
LAFAYETTE CAMPUS

FIRST SEMESTER 1963 - 1964

PAGE 222

LIST OF STUDENTS FOR CAPITAL APPROPRIATIONS STUDY

CURRICULUM	STUDENT NUMBER	STUDENT NAME	CLASS	CREDIT HOURS
ME	937076	WATSON JOHN CHARLES	5	16.0
	938144	WAUGH RICHARD ALLEN	7	20.0
	939636	WEBB DONALD CARL	7	17.0
	944619	WEISS JERRY ALLEN	3	19.0
	948054	WERLE PHILIP CHARLES	4	19.0
	948689	WESNER LARRY DEAN	7	17.0
	948993	WESSEL ROBERT EDWARD	7	17.0
	950611	WESTON ALLEN HEWITT	5	14.0
	954006	WHITE FREDERICK EBENER	6	22.0
	963104	WILLIAMS DONALD EDWARD	7	16.0
	963837	WILLIAMS JERRY K	5	18.0
	968339	WILSON CECIL JAY	7	20.0
	969552	WILSON JAMES LEE	7	17.0
	980489	WOODBURN JOHN C JR	4	17.0
	981950	WOODWARD HOWARD E JR	3	20.0
	981969	WOODWARD JOHN F JR	5	15.0
	983218	WORLEY JAMES LOUIS	4	17.0
	984725	WRIGHT KENTON DOUGLAS	7	16.0
	986065	WRONA JOHN STEPHEN	7	19.0
	986280	WU TING LING	9	16.0
	988013	YANCEY LEE MELGARD	7	17.7
	988772	YAZWLL ROBERT WILLIAM	3	19.0
	989264	YENNI DONALD M JR	7	19.7
	990454	YOKAS WILLIAM HARRY	4	14.0
	990846	YORK MARVIN EUGENE	7	15.0
	991961	YOUNG MICHAEL BAU ON	3	19.0
	992818	YOUNGBLOOD JOHN ROBERT	8	16.0
	993434	YIKIMURA PAUL KAZUO	8	19.0
	994716	ZALLEN DENNIS MICHAEL	5	18.0
	996344	ZESCHKE ROBERT WILLIAM	7	18.0
	996627	ZIELINSKI MICHAEL E	3	19.0
	996636	ZIELKE CARL WILLIAM JR	7	19.0
	996813	ZIERER JOHN WARREN	7	19.0
ME	TOTAL STUDENTS	723 TOTAL CREDIT HOURS		12217.4
		AVERAGE CREDIT HOURS		16.8

APPENDIX A

PURDUE UNIVERSITY
LAFAYETTE CAMPUS

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FIRST SEMESTER 1963 - 1964

LIST OF STUDENTS FOR CAPITAL APPROPRIATIONS STUDY

CURRICULUM	STUDENT	STUDENT NAME	CLASS	CREDIT HOURS
GRAND TOTAL STUDENTS	17674	TOTAL CREDIT HOURS		269836.0
		AVERAGE CREDIT HOURS		15.2

APPENDIX B
PURDUE UNIVERSITY
OFFICE OF THE REGISTRAR

ENROLLMENT REPORT FOR FIRST SEMESTER 1963-64
As of September 18, 1963
Lafayette Campus

Degree Objective	Freshman		Sophomore		Junior		Senior		Other	Total
	1	2	3	4	5	6	7	8		
AVIATION ELECT. TECH.										
Single Men	17	2	7	3						29
Married Men	2	1		1						4
Total	19	3	7	4						33
AVIATION MAINT. TECH.										
Single Men	43	13	40	18						114
Married Men	2	1	2	1						6
Total	45	14	42	19						120
INDUST. ILLUS. TECH.										
Single Men	18	17	15	4						54
Single Women				1						1
Married Men		1	2	2						5
Total	18	18	17	7						60
NURSING TECH.										
Single Women	24									24
Married Women	5									5
Total	29									29
PROF. PILOT TECH.										
Single Men		9		7	1					17
Married		5		3						8
Total		14		10	1					25
TOTAL TECHNOLOGY										
Single Men	78	41	62	32	1					214
Single Women	24			1						25
Married Men	4	8	4	7						23
Married Women	5									5
Total	111	49	66	40	1					267
FRESHMEN ENGR.										
Single Men	1316	57	376	39	24	1				1813
Single Women	14		1							15
Married Men	59	21	15	6	5		2			108
Total	1389	78	392	45	29	1	2			1936
AERONAUTICAL ENGR.										
Single Men		50	17	42	25	40	15	8		197
Single Women		2				1				3
Married Men			5	4	3	4	5	2		23
Total		52	22	46	28	45	20	10		223
AGRICULTURAL ENGR.										
Single Men		10	3	15	3	6	1	3		41
Married Men		1		2	1	1	2	3		10
Total		11	3	17	4	7	3	6		51

Campus -2

APPENDIX B

<u>Degree Objective</u>	Freshman		Sophomore		Junior		Senior			<u>Total</u>
	1	2	3	4	5	6	7	8	9	
CHEMICAL ENGR.										
Single Men			55	13	68	51	66	33	6	292
Single Women						2				2
Married Men			1	1	6	4	9	7	1	29
Total			56	14	74	57	75	40	7	323
CIVIL ENGR.										
Single Men			51	34	75	49	64	33	11	317
Single Women			1			1			1	3
Married Men				6	9	14	13	11	2	55
Total			52	40	84	64	77	44	14	375
ELECTRICAL ENGR.										
Single Men	1	169	50	190	119	171	74	19		793
Married Men		37	7	44	38	73	27	5		231
Married Women				1						1
Total	1	206	57	235	167	244	101	24		1025
ENGINEERING SCI.										
Single Men			17	6	20	16	16	22	1	98
Single Women						2				2
Married Men				2		2	2			8
Total			17	6	22	18	20	24	1	108
INDUSTRIAL ENGR.										
Single Men			22	22	44	21	30	18	4	161
Single Women			1		1					2
Married Men			3		4	3	5	5	3	23
Married Women						1				1
Total			26	22	49	24	35	24	7	187
MECHANICAL ENGR.										
Single Men			118	65	176	89	140	35	20	643
Single Women						1				1
Married Men			4	7	8	13	25	16	6	79
Total			122	72	184	103	165	51	26	723
METALLURGICAL ENGR.										
Single Men			5	3	22	9	10	7	2	58
Married Men			1	1	1		3			6
Married Women					1					1
Total			6	4	24	9	13	7	2	65
TOTAL ENGINEERING										
Single Men	1316	58	873	252	676	383	543	238	74	4413
Single Women	14		5		1	4	3		1	28
Married Men	59	21	62	33	85	78	137	75	22	572
Married Women					2			1		3
Total	1389	79	940	285	764	465	683	314	97	5016
AGRICULTURE										
Single Men	261	20	271	38	175	32	146	19	15	977
Single Women	21		17	1	7		3			49
Married Men	5	3	14	5	14	10	31	7	12	101
Married Women					1	1				2
Total	287	23	302	45	197	42	180	26	27	1129

Campus -3

APPENDIX B

<u>Degree Objective</u>	<u>Freshman</u>		<u>Sophomore</u>		<u>Junior</u>		<u>Senior</u>			<u>Other</u>	<u>Total</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>		
FORESTRY											
Single Men	48	8	38	11	31	10	19	8			168
Single Women		1		1							2
Married Men	1	1	3	3			4	2			14
Total	49	10	36	15	31	10	23	10			184
HOME ECONOMICS											
Single Men	7	8	7	3	5	2	7	1			40
Single Women	202	27	154	38	141	13	111	20			706
Married Men				1		1	1	1			4
Married Women		3	9	2	4	3	12	7			40
Total	209	38	170	44	150	19	131	29			790
HUM., SOC. SCI., & ED.											
Single Men	187	62	275	124	291	83	203	57	37		1319
Single Women	427	25	416	55	433	42	250	15	12		1675
Married Men	4	6	8	18	22	22	54	15	12		161
Married Women	9	11	6	27	24	12	33	13	1		136
Total	627	104	705	224	770	159	540	100	62		3291
INDUSTRIAL ED.											
Single Men	14	23	21	37	35	28	23	14	8		203
Single Women							1	1			2
Married Men	4	2	3	4	18	14	15	15	1		71
Total	18	25	24	41	48	42	39	30	9		276
INDUSTRIAL MGT.											
Single Men					35	48	81	26	8		198
Married Men					4	5	19	9	3		40
Total					39	53	100	35	11		238
PHARMACY											
Single Men			61	8	78	12	74	9	1		243
Single Women			27		27	1	22	1			78
Married Men			1	1	4	3	16	4	2		31
Married Women					1		3				4
Total			89	9	110	16	115	14	3		356
PHYSICAL ED. FOR MEN											
Single Men	40	6	33	10	45	8	34	7	6		189
Married Men	1	2	6	1	8	5	15	5	4		47
Total	41	8	39	11	53	13	49	12	10		236
SCIENCE											
Single Men	351	26	215	42	233	43	153	33	24		1120
Single Women	218	7	120	15	103	11	59	4	2		539
Married Men	2	2	4	4	12	13	25	10	6		78
Married Women	2	2	2	2	8	3	3	2	2		26
Total	573	37	341	63	356	70	240	49	34		1763
TEMPORARY											
Single Men									38		38
Single Women									49		49
Married Men									50		50
Married Women									231		231

Campus -4

APPENDIX B

<u>Degree Objective</u>	<u>Freshmen</u>		<u>Sophomore</u>		<u>Junior</u>		<u>Senior</u>			<u>Other</u>	<u>Total</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>		
UNCLASSIFIED											
Single Men	47	10	12	2	4	3					78
Single Women	6	2	2								10
Married Men	2	4				1					7
Married Women	3										3
Total	58	16	14	2	4	4					98
TOTAL UNDERGRADS											
Single Men	2349	262	1863	559	1609	652	1283	412	173	38	9200
Single Women	912	62	741	111	712	71	449	41	15	49	3163
Married Men	82	49	105	77	162	152	317	143	62	50	1199
Married Women	19	16	17	32	40	18	51	23	3	94	313
Total	3362	389	2726	779	2523	893	2100	619	253	231	13875
VET. SCI. & MED.											
			First Year	Second Year			Third Year			Fourth Year	
Single Men		37			36			23		21	117
Single Women		7			2					1	10
Married Men		11			19			17		23	79
Married Women								1		1	2
Total		55			57			41		46	199
GRADUATE *											
Single Men											1299
Single Women											268
Married Men											1708
Married Women											325
Total											3600*
GRAND TOTAL											
Single Men											10616
Single Women											3441
Married Men											2977
Married Women											640
Total											17674 ←

APPENDIX C
CATALOG FILE SEM. Q 1963-64 8/28/63

Page 1
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				CL	LAB	CR			
57	M E	200	3.	THERMODYNAMICS I		4-	0	-3	
57	ME	285	0.	INDUSTRIAL PRACTICE I		-	-	0	
57	M E	286	0.	INDUSTRIAL PRACTICE II		-	-	0	
57	M E	287	0.	INDUSTRIAL PRACT III		-	-	0	
57	M E	288	0.	INDUSTRIAL PRACT IV		-	-	0	
57	M E	289	0.	INDUSTRIAL PRACT V		-	-	0	
57	M E	302	3.	THERMODYNAMICS IIA		3-	0	-3	
57	M E	304	3.	THERMODYNAMICS IIB		3-	0	-3	
57	M E	305	3.	GEN THERMODYNAMICS I		3-	0	-3	
57	M E	306	3.	GEN THERMODYNAMICS II		3-	0	-3	
57	M E	307	3.	ELEM OF THERMODYNAMIC		3-	0	-3	
57	M E	310	4.	FLUID MECHANICS		3-	2	-4	
57	M E	310L	-.	LABORATORY ONLY			02		
→	57	M E	315	4.	HEAT MASS TRANSFER A		3-	2	-4
57	M E	316	3.	DOMES HEAT AIR COND		3-	0	-3	
57	M E	317	4.	HEAT MASS TRANSFER B		3-	3	-4	
57	M E	340	3.	MEASUREMENTS COMPUTERS		2-	3	-3	
57	M E	360	2.	INTRO TO ENGR DES		1-	3	-2	
→	57	M E	370	4.	MACH ANAL & DESIGN		3-	3	-4
57	M E	407	3.	HEAT TRAN FLUID FLOW		3-	0	-3	
57	M E	416	3.	HEATING AND AIR COND		3-	0	-3	
57	M E	417	3.	COMMER INDUS AIT COND		2-	2	-3	
57	M E	421	3.	REFRIGERATION		3-	0	-3	
57	M E	430	3.	POWER PLANT ENGR		3-	0	-3	
57	M E	433	3.	PRIN TURBO MACHINERY		3-	0	-3	
57	M E	440	3.	INTERNAL COMBUSN ENG		3-	0	-3	
57	M E	444	2.	MECH ENGR LAB		1-	3	-2	
57	M E	451	3.	JET PROPULS POWER PLT		3-	0	-3	
57	M E	452	3.	PROP SYST SPACE FLT		3-	0	-3	
57	M E	460	4.	ENGR DESIGN A		2-	6	-4	
57	M E	461	4.	ENGR DESIGN B		2-	6	-4	
57	M E	462	4.	SYST DES ANAL		2-	6	-4	
57	M E	470	5.	MACHINE DESIGN		3-	6	-5	
57	M E	470L	-.	LABORATORY ONLY			06		
57	M E	475	3.	SYST ANAL CONTROL		2-	3	-3	
57	M E	484	2.	ENGR PROFESSION		2-	0	-2	
57	M E	490	.	DIR READ IN M E		-	-1	TO	
57	M E	497	.	SELECTED TOPICS IN ME			1	TO	
57	M E	499	3.	RESEARCH IN M E		-	-3	AR	
57	M E	500	3.	THERMODYNAMICS		3-	0	-3	
57	M E	505	3.	HEAT TRANSFER		3-	0	-3	
57	M E	510	3.	FLUID MECHANICS		3-	0	-3	
57	M E	522	3.	AIR COND AND REFRIG		3-	0	-3	
57	M E	525	3.	COMBUSTION		3-	0	-3	
57	M E	541	3.	DIESEL ENGINES		3-	0	-3	
57	M E	544	3.	INT COMB ENG LAB		1-	6	-3	
57	M E	545	3.	AUTOMOTIVE ENGR		3-	0	-3	
57	M E	550	3.	MISSILE SYSTEMS DESIGN		3-	0	-3	
57	M E	560	3.	KINEMATICS		3-	0	-3	
57	M E	563	3.	MECHANICAL VIBRATIONS		3-	0	-3	
•	•	•	•	•		•			
•	•	•	•	•		•			
•	•	•	•	•		•			

APPENDIX D

HEAT MASS TRANSFER A M E 315 01 09/18/63

058175	BENBOW MICHAEL STEPHEN	6	ME 4.
113797	BUDD RICHARD MICHAEL	7	ME 4.
175703	COX JAMES RODGER	6	ME 4.
447577	KAAR JOSEPH BROWN	6	ME 4.
575196	MC CORMICK WILLIAM R	7	ME 4.
612077	MOELLER JOSJEPH EDWARD	7	ME 4.
632915	MUTZL CHARLES RONALD	6	ME 4.
647456	NICOLAUS JAMES FRANCIS	7	ME 4.
661010	OLSON ERIC NELS	6	ME 4.
663033	ORME THOBURN LEE	6	ME 4.
745485	ROBERTS THOMAS ALBERT	6	ME 4.
988013	YANCEY LEE MELGARD	7	ME 4.

TOTAL 12 48.0

HEAT MASS TRANSFER A M E 315 02 09/18/63

142694	CHARLSON STEPHEN FRANK	6	ME 4.
291371	GAC CONRAD MICHAEL	6	ME 4.
390704	HIPSKIND ROBERT ALLEN	7	ME 4.
471740	KIRCHNER THOMAS JOSEPH	7	ME 4.
493222	KRUGER LEWIS WILLIAM	6	ME 4.
708956	PRENTICE JAMES ALLEN	6	ME 4.
936241	WATERMAN JEFFREY FRANK	6	ME 4.
990599	YOO CHONG YUL	1	GR 4.
996813	ZIERER JOHN WARREN	7	ME 4.

TOTAL 9 36.0

HEAT MASS TRANSFER A M E 315 03 09/18/63

006271	AITKEN JOHN DONALD II	7	ME 4.
008496	ALEXANDER CHARLES HOMER	7	ME 4.
087149	BOWERS DAVID ALAN	6	ME 4.
348449	HAMILTON WILLIAM J 2	6	ME 4.
352114	HANSEN DOUGLAS JOHN	7	ME 4.
394910	HOFFMAN JACK	7	ME 4.
503944	LANGE KENNETH PATRICK	6	ME 4.
544557	MACATHUR ROBERT IRWIN	7	ME 4.
754096	ROSCOE RICHARD DENNIS	7	ME 4.
954006	WHITE FREDERICK EBENER	6	ME 4.
954936	WHITE RONALD JAMES	5	ME 4.
969325	WILSON HARRY LEE	6	ME 4.

TOTAL 12 48.0

HEAT MASS TRANSFER A M E 315 04 09/18/63

002225	ACKMANN LAWRENCE LEE	8	ME 4.
162553	COLTART DONALD JOHNSON	7	ME 4.
248128	ENDICOTT THOMAS ARTHUR	6	ME 4.
276100	FORBES JAMES CORYDON	5	E 4.
384659	HIGDON RICHARD DALE	6	ME 4.
401375	HOOLEY STANLEY EDWARD	7	ME 4.
404410	HORTON GEORGE ALLEN	9	ME 4.
467883	KIMBLE ROBERT HAROLD	7	ME 4.
508850	LAVELLE MICHAEL ROBERT	7	ME 4.
605047	MILLER RICHARD A JR	8	ME 4.
688144	PETERS DAVID ALLEN	8	ME 4.
727948	REEF JOHN SETH	6	ME 4.
947956	WENZEL RONALD ARTHUR	7	ME 4.

TOTAL 13 52.0

HEAT MASS TRANSFER A M E 315 05 09/18/63

070705	BISHOP JAMES LESLIE	6	ME 4.
101753	BROCK GREGORY C JR	5	ME 4.
184149	CRUM PHIL HORACE	9	ME 4.
214671	DISTERDICK JOHN WILLIAM	6	ME 4.
369132	HAYS RICHARD DALE	7	ME 4.
400987	HONNOLD FRED VAN JR.	7	ME 4.
429673	JENKINS KENNETH LEE	5	ME 4.
431923	JOBE JAMES WILLIAM	7	ME 4.
485282	KOONTZ CARL ALBERT JR	7	ME 4.
549488	MALAK STEPHEN PAUL	7	ME 4.
556089	MARKS FRANKLIN LANG	7	ME 4.
694009	PHILLIPS GLEN ROBERT	7	ME 4.
948689	WESNER LARRY DEAN	7	ME 4.
966339	WILSON CECIL JAY	7	ME 4.

TOTAL 14 56.0

HEAT MASS TRANSFER A M E 315 06 09/18/63

100849	BRINKMANN HERBERT C JR	7	ME 4.
166295	CONRAD JAMES OTTO	6	ME 4.
301588	GEISSLBUHLER JOHN ROBERT	6	ME 4.
363544	HASELBY KENNETH AARON	7	ME 4.
475052	KLEIN RICHARD GRANT	7	ME 4.
602114	MILLER JAN ARNOLD	7	ME 4.
654900	OBEN WILLIAM MORRIS	6	ME 4.
792872	SEBACHER RALPH IGNATIUS	7	ME 4.
849622	STARR WAYNE ELLIOTT	6	ME 4.
996344	ZESCHKE ROBERT WILLIAM	7	ME 4.

TOTAL 10 40.0

HEAT MASS TRANSFER A M E 315 07 09/18/63

024150	ARNDT MICHAEL ROBERT	6	ME 4.
102518	BROMBERG HOWARD JOEL	9	ME 4.
159288	COLBERG RICHARD ARNOLD	6	ME 4.
180418	CRYPE JAMES ALLEN	9	ME 4.
211460	DIEKEN ROGER OTTO	7	ME 4.
215355	DIXON GEORGE SCOTT JR	7	ME 4.
393547	HODGINS BRUCE JOH	6	ME 4.
541675	LUSE RICHARD WAYNE	6	ME 4.
574960	MC CORMICK ROBERT S	7	ME 4.
868425	SUGA KELVIN HISASHI	6	ME 4.

TOTAL 10 40.0

HEAT MASS TRANSFER A M E 315 08 09/18/63

098270	BRICKLEY CHARLES HOWARD	7	ME 4.
186045	CUNDIFF BRUCE T JR	7	ME 4.
294962	GAPPA FRANK WILLIAM	9	AGE 4.
312259	GLOVER RUSSELL KINSLEY	9	ME 4.
420619	INPYN ROBERT WILLIAM	6	ME 4.
540208	LUI RICHARD MICHAEL	6	ME 4.
563018	MASON MICHAEL I.	9	ME 4.
582799	MC KINNEY BRUCE DALE	6	ME 4.
639865	NEEDHAM GEORGE RONALD	7	ME 4.
715278	QUINN CHARLES NORMAN	6	ME 4.
750834	ROGERS JAMES HAROLD	7	ME 4.
878982	TAYLOR GRANDALL SIMEON	7	ME 4.
989264	YENNI DONALD M JR	7	ME 4.

TOTAL 13 52.0

HEAT MASS TRANSFER A M E 315 09 09/18/63

021292	ANSPACH GENE RICHARD	7	ME 4.
027285	ATKINSON LYNN ALLAN	7	ME 4.
136657	CARUSO CHARLES MICHAEL	6	AGE 4.
197931	DAWSON EDWIN THOMAS	6	ME 4.
437544	JOHNSON ROBERT JOSEPH 2	7	AGE 4.
521849	LEWIS JERRY LEE	6	ME 4.
614201	MONOHAN DENNIS LALLY	6	ME 4.
759154	ROWE WILLIAM HASTINGS	7	ME 4.
800753	SHARP LARRY JOSEPH	7	AGE 4.
861394	STONER MARVIN GERALD	6	ME 4.
901325	TRUEX DAVID WILLIAM	6	ME 4.

TOTAL 11 44.0

HEAT MASS TRANSFER A M E 315 10 09/18/63

083249	BOOTY ROBERT ALAN	7	ME 4.
160428	COLE LARRY LEE	7	ME 4.
175488	COX HERMAN LEROY	6	ME 4.
228100	DUNAWAY ROBERT LEE	6	ME 4.
404207	HORSMAN CHARLES DANIEL	9	ME 4.
758117	ROTTIER FRANK	6	ME 4.
778449	SCHIELE CARL ALBERT	7	ME 4.
823222	SMALL JAMES ARTHUR	6	ME 4.
854819	STEPHENSON ROBERT BAIRD	6	ME 4.
866376	STUDEBAKER DAVID ALAN	6	ME 4. ←
925070	WAGNER ROBERT ERNEST	6	ME 4.
969552	WILSON JAMES LEE	7	ME 4.
984725	WRIGHT KENTON DOUGLAS	7	ME 4.

TOTAL 13 52.0

PURDUE UNIVERSITY
LAFAYETTE CAMPUS

FIRST SEMESTER 1963 - 1964

COURSE INFORMATION FOR THE CAPITAL APPROPRIATIONS STUDY

SUBJ. FIELD AND NUMBER	TITLE	CREDIT HOURS	NON-LAB HOURS	LAB HRS	RES HRS	IND ENROL	CREDIT HOURS	NON-LAB HOURS	LAB HRS	RES HRS	IND ENRNL	COURSE TOTALS*****		
												IND	ENRNL	IND
M E 200	TERMODYNAMICS I	3.	4.0				1.0*	1.0*	1.0*	1.0*	1.0*	170	510.0	680.0
235	INDUSTRIAL PRACTICE I	0.					1.0*	1.0*	1.0*	1.0*	1.0*	8	8	8
236	INDUSTRIAL PRACTICE II	0.					1.0*	1.0*	1.0*	1.0*	1.0*	8	8	8
287	INDUSTRIAL PRACT III	0.					1.0*	1.0*	1.0*	1.0*	1.0*	12	12	12
288	INDUSTRIAL PRACT IV	0.					1.0*	1.0*	1.0*	1.0*	1.0*	4	4	4
289	INDUSTRIAL PRACT V	0.					1.0*	1.0*	1.0*	1.0*	1.0*	3	3	3
392	TERMODYNAMICS IIA	3.					1.0*	1.0*	1.0*	1.0*	1.0*	136	408.0	408.0
304	TERMODYNAMICS IIB	3.					1.0*	1.0*	1.0*	1.0*	1.0*	26	78.0	78.0
305	GEN THERMODYNAMICS I	3.					1.0*	1.0*	1.0*	1.0*	1.0*	79	237.0	237.0
306	GEN THERMODYNAMICS II	3.					1.0*	1.0*	1.0*	1.0*	1.0*	47	141.0	141.0
307	ELEM OF THERMODYNAMIC	3.					1.0*	1.0*	1.0*	1.0*	1.0*	270	810.0	810.0
310	FLUID MECHANICS	4.					1.0*	1.0*	1.0*	1.0*	1.0*	163	652.0	469.0
315	HEAT MASS TRANSFER A	4.					1.0*	1.0*	1.0*	1.0*	1.0*	117	468.0	326.0
317	HEAT MASS TRANSFER B	4.					1.0*	1.0*	1.0*	1.0*	1.0*	21	84.0	42.0
340	MEASUREMENTS COMPUTERS	3.					1.0*	1.0*	1.0*	1.0*	1.0*	177	531.0	354.0
360	INTRO TO ENGR DES	2.					1.0*	1.0*	1.0*	1.0*	1.0*	191	382.0	573.0
370	MACH ANAL + DESIGN	4.					1.0*	1.0*	1.0*	1.0*	1.0*	104	416.0	312.0
407	HEAT TRAN FLUID FLOW	3.					1.0*	1.0*	1.0*	1.0*	1.0*	117	351.0	351.0
416	HEATING AND AIR COND	3.					1.0*	1.0*	1.0*	1.0*	1.0*	23	69.0	69.0
440	INTERNAL COMBUSN ENG	3.					1.0*	1.0*	1.0*	1.0*	1.0*	26	78.0	78.0
444	MECH ENGR LAB	2.					1.0*	1.0*	1.0*	1.0*	1.0*	15	30.0	15.0
451	JET PROPLS POWER PL1	3.					1.0*	1.0*	1.0*	1.0*	1.0*	19	57.0	57.0
452	PROP SYST SPACE FLT	3.					1.0*	1.0*	1.0*	1.0*	1.0*	11	33.0	33.0
460	ENGR DESIGN A	4.					1.0*	1.0*	1.0*	1.0*	1.0*	64	256.0	128.0
461	ENGR DESIGN B	4.					1.0*	1.0*	1.0*	1.0*	1.0*	24	96.0	144.0
462	SYST DES ANAL	5.					1.0*	1.0*	1.0*	1.0*	1.0*	6	24.0	36.0
470	MACHINE DESIGN	3.					1.0*	1.0*	1.0*	1.0*	1.0*	19	95.0	114.0
475	SYST ANAL CONTROL	3.					1.0*	1.0*	1.0*	1.0*	1.0*	101	303.0	202.0
484	ENGR PROFESSION	2.					1.0*	1.0*	1.0*	1.0*	1.0*	99	198.0	198.0
490	DIR READ IN M E	1.					1.0*	1.0*	1.0*	1.0*	1.0*	4	2.0	2.0
497	SELECTED TOPICS IN ME	1.					1.0*	1.0*	1.0*	1.0*	1.0*	6.	11.0	11.0

PURDUE UNIVERSITY
LAFAYETTE CAMPUS
FIRST SEMESTER 1963 - 1964
COURSE INFORMATION FOR THE CAPITAL APPROPRIATIONS STUDY

SUBJ. FIELD AND NUMBER		COURSE DESCRIPTION.....		CREDIT		NON-LAB	LAB	RES	IND	CREDIT	NON-LAB	LAB	RES	IND	COURSE TOTALS*****
		TITLE		HOURS	HOURS	HRS	HRS	HRS	HRS	HOURS	HRS	ENRL	ENRL	ENRL	
M E	697	MECH ENGR PROJECTS	AR							1.0*	8	23.0			3
698		RESEARCH M S THESIS	0.	AR						1.0	*	23	91.0		23
699		RESEARCH PH D THESIS	0.	AR						1.0	*	59	436.0		59
699A		RESEARCH PH D THESIS	0.							1.0	*	3			3
TOTALS ...		2465 STUDENTS,		7790.0 CREDIT HOURS,		6266.0 NON LAB HRS,		3068.0 LAB HRS							
				55 COURSES		85.0 RES ENRL.		101.0 IND ENRL							

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APPENDIX E

PURDUE UNIVERSITY
LAFAYETTE CAMPUS

FIRST SEMESTER 1963-64

COURSE INFORMATION FOR THE CAPITAL APPROPRIATIONS STUDY

*****COURSE DESCRIPTION*****										*****COURSE TOTALS*****			
SUBJ. FIELD AND NUMBER	TITLE	CREDIT HOURS	NON-LAB HOURS	LAB HRS	RES HRS	IND HRS	CREDIT HOURS	NON-LAB HOURS	LAB HRS	RES HRS	IND ENRL	ENRL	
											GRAND TOTALS...	93342 STUDENTS, 269836.0 CREDIT HOURS, 1656 COURSES,	230252.6 NON LAB HRS, 1315.0 RES ENRL,

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PURDUE UNIVERSITY

Detail Library Data by Branch

<u>Branch</u>	<u>Bound Volumes</u>	
	<u>Base Year 1961*</u>	<u>1964</u>
Aeronautical Engineering	12,254	14,000
Biochemistry	6,127	7,000
Chemical & Metallurgical Engineering	6,127	7,000
Chemistry	20,131	23,000
Electrical Engineering	5,427	6,200
Horticulture	3,326	3,800
Geology	2,626	3,000
Goss Library	875	1,000
Home Economics	3,939	4,500
Industrial Engineering	4,026	4,600
Industrial Management & AGEC	17,506	20,000
Life Sciences	49,891	57,000
Mathematics	11,816	13,500
Mechanical	7,002	8,000
Pharmacy	12,692	14,500
Physics	16,193	18,500
Vet Science	8,700	8,700
Wiley Memorial (CE)	6,740	7,700
 SUB TOTAL	 195,398	 222,000
Main Library	<u>348,764</u>	<u>398,462</u>
Total Bound Volumes	544,162	620,462
Less Vet Science Branch	<u>8,700</u>	<u>8,700</u>
	535,462	611,762

* Branch Library Volumes estimated.

20 March 64
WCS

DEFINITION OF FULL TIME EQUIVALENT STAFF

The term Full Time Equivalent Staff (FTE) defines the percentage expressing the terms of employment for an operating period between the institution and its employees. This definition implies that only employees of the institution can have a Full Time Equivalency. An individual can not have a Full Time Equivalency unless he or she owes a responsibility for service to the institution as a result of payments made to them by the institution. Staff employed and paid on an hourly basis will have their assignments expressed as a Full Time Equivalent percentage based upon the number of dollars which would normally be earned in a payment period.

The general model for calculating FTE staff is as follows:

$$FTE = \frac{E}{S} \cdot \frac{(P)}{(\%)} \quad \text{where } "E", "S", "P" \text{ and } \% \text{ are conditions of the employment contract and where,}$$

1. "%" equals the employment percentage (or relative workload) mutually agreed upon by employee and employer (i.e., if the employee were required to devote at least 20 hours per week to the position and 40 hours were a normal work week, then the employment percentage is $20 \div 40 \times 100$ or 50%)
2. "S" equals the contracted annual salary;
3. "P" equals the number of payments required to satisfy the annual salary;
4. "E" equals the dollar amount earned in one payment period.

6 June 1964

WCS

PURDUE UNIVERSITY

FULL TIME EQUIVALENT STAFF
By Department and Employee Classification
(First Semester 1963-64)

DEPARTMENT	PROFESSIONAL STAFF			CLERICAL STAFF	TOTAL STAFF
	Research	Classification	1		
Agricultural School					
Dean of Agricultural Administration	4.4			4.0	8.4
Brazilian Assistance Program	11.6			3.5	15.1
Agriculture					
Agricultural Economics	33.3			13.7	47.0
Agricultural Engineering				4.6	17.5
Agronomy				33.6	54.3
Animal Sciences				14.6	78.7
Biochemistry				23.0	69.9
Botany and Plant Pathology				23.0	62.2
Entomology				8.5	36.8
Forestry and Conservation				5.0	33.6
Horticulture				23.5	57.3
TOTAL	16.0	33.3	12.9	265.4	480.8
Agricultural Research					
Agricultural Administration	8.5			13.5	22.0
Agricultural Information	2.5			2.1	4.6
Agricultural Statistics				2.2	2.7
Agricultural Economics				3.8	16.3
Agricultural Engineering				4.7	12.3
Agronomy				17.2	43.9
Animal Sciences				.3	33.6
Biochemistry				9.2	5.1
Home Economics				24.8	32.4
Veterinary				16.8	99.9
TOTAL	11.0	13.0	16.8	66.5	207.2

DEPARTMENT	PROFESSIONAL STAFF			CLERICAL STAFF	TOTAL STAFF
	1	2	3		
Agricultural Extension					
Director	7.4	7.5		3.9	11.3
Agricultural Information			19.3	16.3	23.8
Agricultural Economics				16.4	35.7
Agricultural Engineering				1.5	5.1
Agronomy	7.1			4.2	11.3
Animal Sciences	11.2			5.0	16.2
Botany	3.5			1.0	4.5
Entomology	2.7			1.0	3.7
Forestry and Conservation	6.4			1.0	7.4
Horticulture	7.5			4.0	11.5
Veterinary	2.0			.7	2.7
Home Economics	10.7			10.5	10.5
Four-H Clubs	9.7			6.2	16.9
County Agents				4.9	14.6
Home Demonstration Agents			4.0	5.0	9.0
Personnel Training	3.0			.5	3.5
Agriculture Visual Aids	3.9			5.5	9.4
TOTAL	7.4	94.5	4.0	14.1	197.1
Schools of Engineering					
Engineering Administrator	13.5			11.4	24.9
Aero and Engineering Sciences				14.8	84.4
Aeronautical Engineering					
Astronautics					
Chemical Engineering	29.1			9.2	38.3
Civil Engineering	121.7			30.1	151.9
Electrical Engineering				22.5	142.3
Freshman Engineering				2.0	6.5
E. SC. Engineering Sciences					
Geology					
Industrial Engineering					
				31.1	
				16.0	47.1

DEPARTMENT	PROFESSIONAL STAFF			CLERICAL STAFF	TOTAL STAFF
	1	2	3		
<u>Schools of Engineering (contd.)</u>					
Mechanical Engineering	105.6			49.9	155.5
Metallurgical Engineering	12.1			7.5	19.6
Nuclear Engineering	10.3			3.1	13.4
TOTAL	18.0			166.5	683.9
<u>School of Science</u>					
School of Science Administration	10.1			6.0	16.1
Biological Sciences		124.2		58.8	183.0
Chemistry			195.5	58.9	254.4
Physics				69.6	206.3
Mathematics	154.1			8.0	162.1
Statistics	11.2			2.0	13.2
Computer Science		14.0		14.3	28.3
TOTAL	10.1	165.3	14.0	217.6	863.4
<u>School of Pharmacy</u>					
Pharmacy Administration			23.2	5.5	28.7
Pharmacy				1.5	8.5
Bionucleonics				5.6	5.6
Pharmaceutical Chemistry					
Pharmacology				7.8	8.8
Pharmacognasy					
Physical Pharmacy					
TOTAL	36.6	7.0	8.0	51.6	
<u>Military Science</u>					
Air Science				2.0	23.0
Military Science				2.0	32.0
Naval Science				1.0	19.0
University Band				1.3	4.3
TOTAL	3.0			6.3	78.3

DEPARTMENT	PROFESSIONAL STAFF			CLERICAL STAFF	TOTAL STAFF
	Research	Classification	Total		
	1	2	3	4	
<u>School of Industrial Management</u>					
Administration	77.3			16.6	93.9
Kramnert Graduate School	10.2			1.0	11.2
Economics					
Industrial Management	87.5			17.6	105.1
TOTAL					
<u>School of Home Economics</u>					
	4.5				
Home Economics Administration		10.5		6.6	11.1
Clothing and Textiles		5.2		1.6	12.1
Equipment and Family Housing		9.1		1.0	6.2
Foods and Nutrition				4.5	13.6
Home Economics					
Home Management and Family Economics		5.2		.5	5.2
Institutional Management	4.5	5.2	4.7	1.0	6.2
TOTAL				15.2	54.4
<u>Humanities, Social Science & Education</u>					
	11.1				
Administration			20.9	6.5	17.6
Audiology & Speech Science				6.0	26.9
Art and Design		14.8		1.0	15.8
Child Development & Family Life			15.5	2.0	17.5
English				6.0	105.5
Education				25.4	97.7
General Studies				1.7	1.7
History, Government & Philosophy				39.6	42.5
Modern Languages				54.3	62.3
Psychology				44.6	55.5
Sociology					27.1
Speech					39.8
Physical Education - Men					24.3
Physical Education - Women					18.3
					4.0
					14.3

DEPARTMENT	PROFESSIONAL STAFF			CLERICAL STAFF	TOTAL STAFF
	Research	Classification			
0	1	2	3	4	
<u>Humanities, Social Science & Education (contd.)</u>					
Achievement Center for Children	11.1	373.4	5.5	.5	6.0
TOTAL			86.5	87.5	558.5
GRAND TOTAL	150.1	772.2	109.2	936.7	463.1
				848.9	3,083.1

PURDUE UNIVERSITY
 Reconciliation of F.T.E. Staff Report
 and Official Auditor's F.T.E. Staff Report

	<u>FTE STAFF REPORTED</u>	<u>AUDITOR</u>
Balances Per FTE Academic Staff Reported and Auditors Report:	3083.1	3790.6
Departments which Auditor Reported Too many staff: English (107.2 vs 105.8)		-1.4
Excluded departments reported by Auditor:		
Carneg. Foundation (CIC)		-4.7
Library (Special Treatment)		-178.4
National Institute of Health		-1.9
Other AES Research		- .7
(Sub Total)		(-187.1)
Departments in which not enough staff were reported Naval Science (18.0 vs 19.0 - omitted clerical) General Studies (1.7 vs 3.1 - omitted classified)		+1.0 +1.4(Engl?)
Departments not reported by Auditor Univ. Extn. Adm.		+32.3
Engineering Technology		+1.0
Nurses Training		+3.0
(Sub Total)		(+38.7)
Rounding error		
Less Staff to be excluded		364.1
Plus extension (CES) staff	<u>197.1</u>	<u>_____</u>
CONTROL BALANCES	3280.3	3280.3

3-25-64
WCS

PUERTO RICO UNIVERSITY STAFF PAYROLL DATA
SUMMARY OF TOTAL UNIVERSITY STAFF BY POSITION
AS OF OCTOBER 31, 1973

APRIL 7, 1964

PURDUE UNIVERSITY STAFF PAYROLL DATA
SUMMARY BY DEPARTMENT AND POSITION
AS OF OCTOBER 31, 1963

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DEPARTMENT - 10361, AIR SCIENCE

INSTRUCTIONAL STAFF				
7I HEAD PROFESSOR	1.0			
5I ASSOC. PROFESSOR	2.0			
4I ASST. PROFESSOR	11.0			
TOTAL PROFESSIONAL INST. STAFF				
2I GRADUATE INSTRUCTIONAL ASST.	7.0	14.0		60.9
TOTAL GRADUATE INST. STAFF				
TOTAL INSTRUCTIONAL STAFF		7.0		30.4
TOTAL ADMIN., ACADEMIC + RESEARCH STAFF			21.0*	91.3
OTHER STAFF				
C CLERICAL-REGULAR	2.0			
SUB-TOTAL			2.0	8.7
TOTAL OTHER STAFF			2.0*	8.7
DEPARTMENTAL TOTAL	*****		.23.0***	100.0

PURDUE UNIVERSITY STAFF PAYROLL DATA
ALPHABETICAL LISTING BY DEPARTMENT
AS OF OCTOBER 31, 1963

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APRIL 7, 1964

DEPARTMENT - 10361, AIR SCIENCE

REGULAR STAFF

BUDGET ACCT	STAFF NO	STAFF NAME	POSITION	F.T.E.
103612	03339	T W BAILEY	4110	1.000
103612	03632	T S BAKES	4110	1.000
103612	06493	T I BERTSCH	C12	1.000
103612	10873	T L BROWN	1C12	1.000
103612	11779	T R BULL JR	4110	1.000
103612	13603	T J CAREY	2110	1.000
103612	18488	T J COURTANEY	4110	1.000
103612	23047	T J DOBBS	4110	1.000
103612	24693	T F EBERHARDT	4110	1.000
103612	25740	T R ENSEY	4110	1.000
103612	48037	T B KELLY	4110	1.000
103612	48146	T A KEMPTON	7110	1.000
103612	49996	T F KNUDSON	2110	1.000
103612	53768	T F LEWIS	2110	1.000
103612	56466	T D MAHONEY	2110	1.000
103612	61930	T F MERZ	5110	1.000
103612	67428	T G NOWAK	2110	1.000
103612	74628	T M REAGAN	4110	1.000
103612	74686	T I RED ELK	2110	1.000
103612	75301	T A REYNOLDS	5110	1.000
103612	77946	T P ROWTON	4110	1.000
103612	83882	T R SLAGLE	4110	1.000
103612	91392	T P TRUSTY	2110	1.000

TOTAL NO. REGULAR EMPLOYEES 23

TOTAL F.T.E. 23.000

PURDUE UNIVERSITY
REFERENCE LIST OF FTE STAFF
FROM PAYROLL DATA OF OCTOBER 31, 1963
JANUARY 17, 1964

PAGE 1

STAFF NO.	EMPLOYEE NAME	FTE STAFF	POSITION CODE	DEPARTMENT NO.	NAME	PROJ NO.	BUDGET ACCOUNT
03070	R G BABINGTON	0.625	2G12	10-304	PHARMACOLOGY	3703	51-8042
03074	C H BACHE	0.357	3R12	10-206	ACEC	4164	42-7062
		0.142	3R12	10-206	ACEC		66-7062
03090	W B BACHE	1.000	5I1C	10-318	ENGL		10-3182
03110	G B BACHMAN	1.000	5I1C	10-344	CHM		10-3442
03119	R F BACKE	0.187	T	10-243	VMI		10-2432
03120	*A A BACKSCHEIDER	0.381	T	81-111	MEN S QUAD		81-1115
		0.250	1I1C	10-347	MA		10-3472
03128	L A BADEAU	0.500	2A09	81-155	STU UN CTS	2931	81-1552
03144	V V BADINGER	1.000	3R12	10-344	CHM		61-8442
03152	F E BAER	1.000	S12	10-920	SFRV MNT OPN		09-9202
03162	K F BAER	1.000	1A12	10-900	PP ADMIN		10-9032
03176	A E BAETSLE	0.100	T	10-360	LIBR		10-3802
03178	R J BAETSLE	1.000	2C12	10-180	LIBR		10-3902
03225	G A BAGBY	1.000	3S12	81-455	HALL X		81-4552
03227	N P BAGBY	1.000	3S12	81-133	H-2		31-1333
03240	C R DAHLER MD	1.000	3A12	83-700	HEALTH CTR		83-7185
03255	P L BAHLS	1.000	3C12	81-800	HEC LUNCH		81-F003
03262	A P BAIAD JR	0.500	2A09	81-155	STU UN CTS		81-1552
03267	J J BAIER	0.250	2I1C	10-322	HIST		10-3222
03278	C C BAILEY	0.250	4R12	10-214	EF		10-2802
03300	G W BAILEY	1.000	3S12	81-400	ACRY	3748	51-7142
03303	I N BAILEY	1.000	T	81-133	ADM-WRH		81-4003
03305	J T BAILEY	0.425	S12	10-900	H-2		81-1333
03306	J J BAILEY	1.000	5S12	80-260	SAFETY + SEC		09-9602
03315	L E BAILEY	1.000	4I12	10-289	MACHINE SHOP		80-2605
03325	R E BAILEY	1.000	AF12	12-569	NUCL		10-2892
03326	R L BAILEY	0.380	AK12	12-569	CC-AGENT-CES		20-5692
		0.390	5S12	81-600	DIR FAM HSE		40-5692
03329	R L BAILEY	0.950	2S12	83-700	HEALTH CTR		81-6002
03337	S F BAILEY	1.000	4I12	10-361	AFT		83-7225
03339	T W BAILEY	1.000	2I1C	10-293	IM		10-3612
03341	V B BAILEY	0.250	2R10	10-293	IM	0287	10-2932
		0.250	2S12	81-400	ADM-WRH		64-7932
03338	V M BAILEY	1.000	2S12	81-188	H-4		81-4003
03342	W K BAILEY	0.900	2S12	81-346	PHYS		81-1892
03296	F P BAILEY JR	1.000	7S12	81-155	STU UN CTS		10-3462
03244	C B BAILLIEUL	0.321	T	10-348	STAT		81-1553
03358	*C E BAIN	0.500	3I12	80-250	COMP SCI CTR		10-3482
		0.500	3R12	80-250	SCC		80-2505
03360	R K BAIN	1.000	4I10	10-333	PP ADMIN		10-3332
03362	R A BAITHER	0.600	T	10-900	CHM		09-9032
03264	W E BAITINGER	1.000	3R12	10-344	VET	3600	10-3442
03357	N C PAITY	0.127	T	10-232	PHYS		51-7322
03359	K K BAJAJ	0.500	2I1C	10-346	MA		10-3462
03265	S BAJAJ	0.500	2I1C	10-347	PERSTRNG-CES		40-5752
03270	E L BAKER	0.250	2E12	12-575	DIR FAM HSE		81-6002
03371	B L BAKER	1.000	3S12	81-600	AG STAT-AES		14-7052
03404	C L BAKER	0.340	3R12	14-705	SFRV MNT OPN		09-9202
03419	D L BAKER	1.000	S12	10-920	SPE		10-3352
03463	E E BAKER	0.500	3I12	10-235	FT W CENTER		18-4362
03466	E L BAKER	1.000	3S12	16-404	FE		10-2802
03467	F M BAKER	1.000	2C12	10-240	PURDUE FARMS		10-2272
03500	G A BAKER	0.500	3I12	10-231	PURDUE FARMS		80-7205
		0.170	3R12	10-231	VET		25-7322
03525	K K BAKER	1.000	5S12	10-232	PSY		10-3312
03548	K M BAKER	1.000	6I12	10-331	MEN S QUAD		81-1112
03544	N C BAKER	1.000	XS12	81-111	STU UN CTS		81-1553
03545	N F BAKER	0.347	T	81-155	BISC		10-3422
03575	R A BAKER	0.500	2I1C	10-342	SFRV MNT OPN		09-9202
03584	R E BAKER	1.000	1A12	10-920	H-3		81-1442
03585	R F BAKER	0.500	2A09	81-144	ADM-WRH		81-4003
03568	R P BAKER	1.000	3S12	81-400	MEN S QUAD		81-1113
03598	S D BAKER	0.156	T	81-111	MEN S QUAD		81-1113
03620	T T BAKER	1.000	3S12	81-111	AFT		10-3612
03632	T S BAKES	1.000	4I12	10-361	MA		10-3472
03635	W C BAKKER	0.500	2I1C	10-347	MLS		10-3272
03637	A BAKTAY	1.000	2C12	10-327	SERV MNT OPN		09-9202
03638	E BAKTAY	1.000	S12	10-920	CE		10-2762
03640	G Y BALACI	0.212	4S12	10-276	CE	0021	63-7762
		0.487	T	10-276	METF	0703	63-7882
03642	N BALASUPRAMANIN	0.500	2G12	10-280	STATE CHEM	3311	55-7199
03646	P BALBACH	1.000	3R12	55-719			

PURDUE UNIVERSITY SUMMARY
SPACE INVENTORY
BY TYPE OF SPACE AND BUILDING CLASSIFICATION
ASSIGNABLE SQUARE FEET
10/1963

BUILDING CLASSIFICATION

TYPE SPACE	BUILDING CLASSIFICATION			TOTAL
	SATISFACTORY	ALTER	REMODEL	
ACADEMIC				
A-CLASSROOMS	127218	43676	29028	199922
B-TEACHING LABS	238058	68580	63719	370357
C-MUSIC PRACTICE				
D-MUSIC STUDIOS	48436	66124	23919	64355
E-GYM	218117	56438	85233	416838
F-OFFICE	394695	6037	369479	549235
G-RESEARCH			511170	
SUB TOTAL A-G	1618524	228818	267941	1515283
H-LIBRARY				
1. STUDY HALL	53129	8523	4712	66364
2. CARRER	7770		7770	7770
3. LIBRARY SERV.	42310		42354	42354
4. STACK	61309	2674	3099	65482
SUB TOTAL H	164518	10597	7855	182970
SUB TOTAL A-H	1183042	239415	275796	1696253
I-MUSEUM				
J-STORAGE SPACE				
K-OTHER FIELD BUILDING				
1. MISCELLANEOUS	612		1084	80
2. UNCLASSIFIED	13342		15043	661
3. REMODELING	6825		6825	15704
4. REHEALTH SERV.	622		622	6825
5. MERCHANTISING SERV.	513		513	622
6. MERCHANDISING SERV.	513		513	513
7. SHOP	24240	5019	4450	33709
SUB TOTAL K		46184	6261	6151
SUB TOTAL I-K		70175	17044	31643
TOTAL ACADEMIC A-K		1253217	256459	307439
OVERHEAD		207958	3024	1133
TOTAL ACADEMIC AND OVERHEAD		1461175	259433	308572
EXCLUDED		3323825	1438	15879
GEN BLDG		1265279	76027	85275
GRAND TOTAL		6050279	336948	409726

SCHOOL	DEPARTMENT NO. NAME	ROOM CLASSIFICATION	NO. ROOMS	CLASSIFICATION	NO. ROOMS	AREA	STATIONS	NO. STATIONS
MILITARY SCIENCES								
	10261 AFT	OFFICE	17.0	OFFICE SERV	2.0	17.0	3135	30
		OFFICE	2.0	SERV	2.0	2.0	268	30
		* TOTAL BY MAJOR SPACE CLASSIFICATION			19.0	19.0	3403	30
	10261 AFT	STUDY HALL	1.0		1.0	1.0	372	10
		* TOTAL BY MAJOR SPACE CLASSIFICATION			1.0	1.0	372	10
	10261 AFT	SHOP	1.0		1.0	1.0	332	1
		* TOTAL BY MAJOR SPACE CLASSIFICATION			1.0	1.0	332	1
		** TOTAL BY DEPARTMENT			21.0	21.0	4107	41
	10263 MILT	T LAB SERV	1.0		1.0	1.0	264	
		* TOTAL BY MAJOR SPACE CLASSIFICATION			1.0	1.0	264	
	10263 MILT	OFFICE	10.0	OFFICE SERV	7.0	10.0	2388	35
						7.0	1298	
		* TOTAL BY MAJOR SPACE CLASSIFICATION			17.0	17.0	3686	35
	10263 MILT	ARMORY	1.0	ARM SERV	0.0	1.0	33142	269
					0.0	0.0	4451	
		* TOTAL BY MAJOR SPACE CLASSIFICATION			6.0	6.0	37591	261
	10263 MILT	SHOP	1.0		1.0	1.0	990	
		* TOTAL BY MAJOR SPACE CLASSIFICATION			1.0	1.0	990	
		** TOTAL BY DEPARTMENT			25.0	25.0	42531	296
	10365 NS	T LAB SERV	2.0		2.0	2.0	322	
		* TOTAL BY MAJOR SPACE CLASSIFICATION			2.0	2.0	322	
	10365 NS	OFFICE	12.0	OFFICE SERV	4.0	12.0	3238	22
					4.0	4.0	704	
		* TOTAL BY MAJOR SPACE CLASSIFICATION			17.0	17.0	4031	22
	10365 NS	ARMORY	2.0	ARM SERV	1.4	2.0	5680	100
					1.4	1.4	382	
		* TOTAL BY MAJOR SPACE CLASSIFICATION			3.4	3.4	6062	100
		** TOTAL BY DEPARTMENT			22.4	22.4	10415	122

BUILDING NO., NAME	DEMOLISH SPACE BY BUILDING BY FLOOR FLOOR	CLASSIFICATION	FLOOR AND ROOM CLASSIFICATION	NO. ROOMS	NO. AREA	NO. STATION
** TOTAL BY FLOOR			34.0	10982	46	
*** TOTAL BY BUILDING			34.0	10982	48	
C97 FWAT	1	CUSTODIAL REST ROOM CIRCUL	4.0 C 4.0 C 3.0 C	102 346 1691		
* TOTAL BY MAJOR SPACE CLASSIFICATION			11.0	2139		
C97 FWAT	1	CLASSROOM	1.0 C	1050	24	
* TOTAL BY MAJOR SPACE CLASSIFICATION			1.0 C	1050	24	
C97 FWAT	1	OFFICE SERV	19.0 C 2.0 C	3427 268	32	
* TOTAL BY MAJOR SPACE CLASSIFICATION			21.0 C	3695	22	
097 FWAT	1	STUDY HALL	1.0 C	372	10	
* TOTAL BY MAJOR SPACE CLASSIFICATION			1.0 C	372	10	
C97 FWAT	1	SHOP	1.0 C	332	1	
* TOTAL BY MAJOR SPACE CLASSIFICATION			1.0 C	332	1	
** TOTAL BY FLOOR			35.0 C	7588	67	
*** TOTAL BY BUILDING			35.0 C	7588	67	
098 FWAS	1	REST ROOM CIRCUL	2.0 C 2.0 C	65 421		
* TOTAL BY MAJOR SPACE CLASSIFICATION			4.0 C	486		
C92 FWAS	1	LAB SERV	6.0 C	2260	21	
* TOTAL BY MAJOR SPACE CLASSIFICATION			6.0 C	2260	21	
C98 FWAS	1	OFFICE SERV COMPNS	7.0 C 1.0 C	876 23 50	9	
* TOTAL BY MAJOR SPACE CLASSIFICATION			9.0 C	946	9	
098 FWAS	1	SHOP STORAGE	1.0 C 2.0 C	248 507 755	2	
* TOTAL BY MAJOR SPACE CLASSIFICATION			2.0 C	248 507 755	2	

COURSE DESCRIPTION	TYPE SECTION NUMBER	TIME DAY, HOUR, AND (WEEKS)	CLASS SIZE	INSTRUCTOR-NAME	NUMBER		
AGRY 694 RESEARCH PH D THESIS	CREDIT 0.						
RES 1	ARRANGÉ 01	HOUR	1	W H DANIEL	20601		
RES 2	ARRANGÉ 01	HOUR	1	D SMARTZENDRUBER	88826		
RES 3	ARRANGE 01	HOUR	1	J L WHITE	95591		
AFT 11C BASIC AIR FORCE TRAIN	CREDIT 2.						
PRIM 1	M F 07.30		EE 170	120	E R BULL	11779	
PRIM 2	M F 08.30		EE 170	122	E R BULL	11779	
PRIM 3	M F 12.30		EE 170	119	E R BULL	11779	
PRIM 4	M F 01.30		EE 170	120	E R BULL	11779	
PRIM 5	T T 10.30		EE 170	120	J B KELLY	48037	
PRIM 6	T T 11.30		EE 170	118	J B KELLY	48037	
PRIM 7	T T 03.30		EE 170	119	J B KELLY	48037	
PRIM 8	T T 04.30		EE 170	121	H RENSEY	25740	
PRIM 9	W S 10.30		EE 170	122	C F MERZ	6193C	
PRIM 10	W S 11.30		EE 170	120	C F MERZ	61930	
SUMMARY.	CLOCK HOURS	ROOM HRS	STAFF HRS	STUDENT HRS	SECTIONS	STUDENTS	Avg.
20.0	20.0	20.0	20.0	2402.0	10	1201	12C
LAB 1	M 08.30		AR 106	77	T S BAKES	3632	
LAB 2	M 10.30		AR 106	75	E R BULL	11779	
LAB 3	M 03.30		AR 106	73	T M REAGAN	74638	
LAB 4	T 08.30		AR 106	76	D E COURTANEY	18488	

COURSE DESCRIPTION CLASS NUMBER				SECTION	TIME	DAY, HOUR, AND (WEEKS)	BLDG ROOM	SIZE	INSTRUCTOR-NAME	NUMBER	
AFT 110	LAB	5	T	12.30			AR	106	76	T W BAILEY	3339
	LAB	6	T	01.30			AR	106	75	J R SLAGLE	83882
	LAB	7	T	03.30			AR	106	73	S P ROWTON	77946
	LAB	8	W	10.30			AR	106	75	C E DOBBS	23047
	LAB	9	T	08.30			AR	106	74	D E COURTANEY	18482
	LAB	10	T	12.30			AR	106	75	T W BAILEY	3339
	LAB	11	T	01.30			AR	106	75	J R SLAGLE	83882
	LAB	12	T	03.30			AR	106	76	S P ROWTON	77946
	LAB	13	F	08.30			AR	106	75	T S BAKES	3632
	LAB	14	F	10.30			AR	106	74	E R BULL	11779
	LAB	15	F	03.30			AR	106	76	T M REAGAN	74636
	LAB	16	S	10.30			AR	106	76	C E DOBBS	23047
SUMMARY.				CLOCK HOURS	ROOM HRS	STAFF HRS	STUDENT HRS	SECTIONS	STUDENTS	Avg. CL. SIZE	
				16.0	16.0	16.0	1201.0	16	1201	75	
AFT 230 BASIC AF TRAINING CREDIT 2.											
PRIM 1	M	F	09.30				EE	170	53	T S BAKES	3632
PRIM 2	M	F	10.30				EE	170	57	T S BAKES	3632
PRIM 3	M	F	11.30				EE	170	56	T S BAKES	3632
PRIM 4	M	F	02.30				EE	170	57	T S BAKES	3632
PRIM 5	M	F	03.30				EE	170	58	T W BAILEY	3339
PRIM 6	M	F	04.30				EE	170	55	T W BAILEY	3339
PRIM 7	T	T	07.30				EE	170	55	J R SLAGLE	83882
PRIM 8	T	T	08.30				EE	170	57	J R SLAGLE	83882
PRIM 9	T	T	09.30				EE	170	55	J R SLAGLE	83882

FIRST SEMESTER 1963-64
CLASS ORGANIZATION SUMMARY REPORT

**CLASS ORGANIZATION SUMMARY REPORT
FIRST SEMESTER 1983-84**

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	STUDENT HOURS			ENRL IN			STAFF HOURS			ROOM HOURS			STU-HRS/STAFF-HRS		
	NCN-LAB	LAB TOTAL	OTHER	NON-LAB	LAB TOTAL	NON-LAB	LAB TOTAL	NON-LAB	LAB TOTAL	NON-LAB	LAB TOTAL	NON-LAB	LAB TOTAL	NON-LAB	LAB TOTAL
AFT															
LOWER	4076.0	2038.0	6114.0	•	50.0	32.0	82.0	•	50.0	32.0	82.0	•	81	63	74
UPPER	7400.0	185.0	925.0	•	36.0	32.0	68.0	•	36.0	32.0	68.0	•	20	5	13
DUAL				•				•				•			
GRAD				•				•				•			
OTHER				•				•				•			
TOTAL	4816.0	2223.0	7039.0	•	86.0	64.0	150.0	•	86.0	64.0	150.0	•	56	34	46

COMPUTER AUDITS OF CLASS ORGANIZATION INFORMATION

I. The Class Organization Information (Form G) is first audited for completeness and consistency. These checks include testing:

- (A) the type-of-instruction code to see if the numbers punched correspond to an element in the set of possible values.
- (B) the day-of-the-week code in a similar manner.
- (C) the hour-of-the-day code to see if it has the proper format.
- (D) the night-class code to see if it is either blank or 'P'.
- (E) non-average hour courses for the existence of a building and room.
- (F) the student enrollment for a positive zero value.
- (G) for the omission of the instructor's name or number.
- (H) testing the number of weeks code for a positive non zero number.

II. Next the Form G is tested against both the course enrollment report and University catalog. These include tests to determine:

- (A) if the course is listed in the catalog.
- (B) if the course is listed in the course enrollment report.
- (C) if the course is described as the same type (non-lab, lab, research, individual, work shop etc.) as it is in the catalog.
- (D) if the course is taught the same number of hours that the catalog prescribes.
- (E) if different parts of the course(lab, non-lab) have consistent enrollments.

III. Next the Form G is tested against the Space Inventory. These include tests to determine:

- (A) if the building and room reported on the Form G can be found in the space inventory.
- (B) if two classes are meeting in the same room at the same time.
- (C) if the class size exceeds the number of stations in the room.
- (D) if the room has zero stations.
- (E) a listing of classrooms not used.

IV. Proposed audits include tests to determine:

- (A) if the instructor listed on the Form G exists on the University Payroll.
- (B) if the instructor listed on the Form G is getting paid from the teaching department.
- (C) if an instructor is listed on the Form G as teaching in two places at the same time.

1ST 63-64 FEBRUARY 17, 1964

ROOM UTILIZATION REPORT

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AFT	BLDG ROOM FWA7 026	TYPE ROOM CLASSROOM	SECTION 10361CV 6	DEPARTMENT GEN ACAD	AREA 01050 SQUARE FEET		ROOM SIZE 24 STUDENT STATIONS
					COURSE	TYPE INST	
AFT	AFT	350	1	PRIM	M	F 07.30-08.30	23
AFT	AFT	350	2	PRIM	M	F 11.30-12.30	16
AFT	AFT	350	3	PRIM	M	F 01.30-02.30	22
AFT	AFT	350	4	PRIM	T T	09.30-10.30	24
AFT	AFT	350	5	PRIM	T T	03.30-04.30	24
AFT	AFT	470	1	PRIM	M	F 09.30-10.30	17
AFT	AFT	470	2	PRIM	M	F 03.30-04.30	20
AFT	AFT	470	3	PRIM	T T	07.30-08.30	18
AFT	AFT	470	4	PRIM	T T	01.30-02.30	21

ROOM USAGE	STUDENTS	STUDENT HRS	PERCENTAGE STATION USE	AREA/STATION	ROOM HOURS	SQ FT/STUDENT HRS
185	740	86 WHEN IN USE 56 TOTAL	43.7	65 PCT	36.0	1.4

AFT NUMBER OF CLASS SESSIONS BY SIZE PER WEEK IN CLASSROOMS

ROOM CAPACITY.	0	10	20	30	40	50	60	70	80	100	120	140	160	180	200	•
0- 9	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
10- 19	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	36
20- 29	•	•	12*	24*	•	•	•	•	•	•	•	•	•	•	•	•
30- 39	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
40- 49	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
50- 59	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
60- 69	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
70- 79	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
80- 99	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
100-119	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
120-139	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
140-159	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
160-179	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	50
180-199	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
200- UP	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
TOTAL	•	•	•	•	12.	24.	•	•	•	30.	•	•	•	6.	14.	86

NUMBER OF CLASS SESSIONS BY SIZE PER WEEK IN OTHER AREAS

AFT	ROOM CAPACITY.	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	100-110	110-120	120-130	130-140	140-150	150-160	160-170	170-180	180-190	190-200	TOTAL
0- 9	0	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
10- 19	10	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
20- 29	20	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
30- 39	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
40- 49	40	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
50- 59	50	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
60- 69	60	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
70- 79	70	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
80- 99	80	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
100-119	100	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
120-139	120	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
140-159	140	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
160-179	160	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
180-199	180	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
200- UP	200	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	TOTAL	•	32	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
																						64

PURDUE UNIVERSITY
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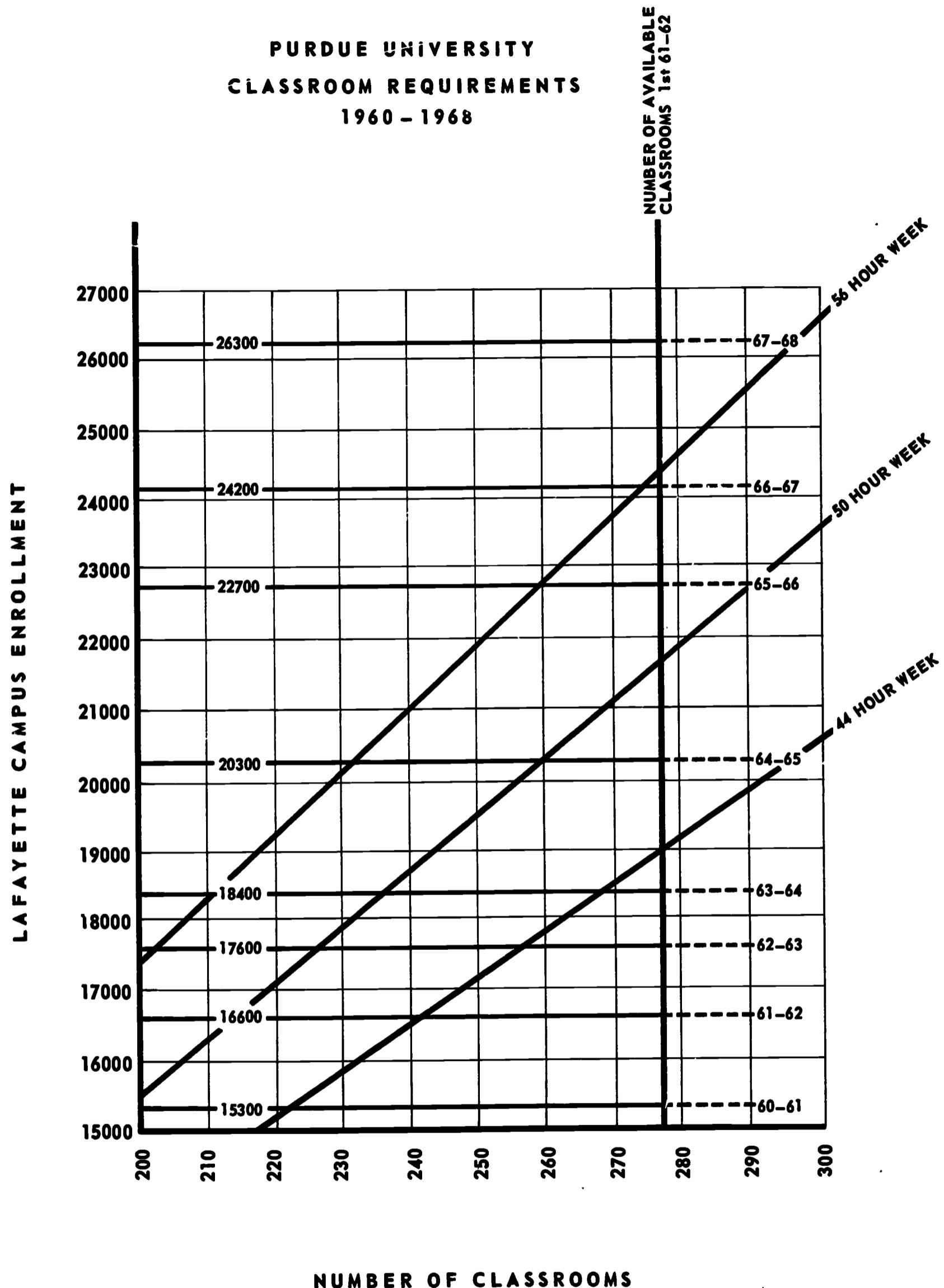
NUMBER OF CLASS SESSIONS BY SIZE PER WEEK IN CLASSROOMS

UNIV	0	10	20	30	40	50	60	70	80	90	100	120	140	160	180	200	200+
ROOM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROOM CAPACITY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10+
•	9	19	29	39	49	59	69	79	99	119	139	159	179	199	199	199	199+
0- 9	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	44
10- 19	•	22	22	•	•	•	•	•	•	•	•	•	•	•	•	•	900
20- 29	•	56	251	576	17	•	•	•	•	•	•	•	•	•	•	•	1656
30- 39	•	70	300	1027	257	2	•	•	•	•	•	•	•	•	•	•	1781
40- 49	•	174	545	664	326	72	•	•	•	•	•	•	•	•	•	•	1195
50- 59	•	88	163	336	274	257	74	3	•	•	•	•	•	•	•	•	627
60- 69	•	32	159	193	99	85	45	14	•	•	•	•	•	•	•	•	182
70- 79	•	16	24	43	20	36	32	9	2	•	•	•	•	•	•	•	312
80- 99	•	11	30	42	42	52	45	32	50	8	•	•	•	•	•	•	136
100-119	•	2	11	30	59	22	4	2	6	•	•	•	•	•	•	•	46
120-139	•	2	16	1	10	4	4	3	3	•	•	•	•	•	•	•	50
140-159	•	•	3	6	•	4	5	5	20	3	3	3	1	•	•	•	106
160-179	•	1	2	3	2	2	33	2	2	17	16	23	3	•	•	•	14
180-199	•	•	•	1	•	4	2	•	•	4	•	•	1	•	•	•	23
200- UP	•	3	6	9	•	1	4	8	5	11	13	16	14	22	40	71	223
TOTAL	•	475	1520	2908	1084	570	267	82	69	65	36	42	19	22	42	71	7272

COURSE PROJECTION...BASE SEMESTER-1ST 63-64...PROJECTED SEMESTER-1ST 72-73
 DATE RUN ...MAY 28, 1964

COURSE TOTALS									
AFT	COURSE DESCRIPTION			NON-LAB HRS	RES HRS	IND HRS	STUDENTS	CREDIT HOURS	NON-LAB HOURS
CRS NO.	TITLE	CREDIT HOURS	HOURS	IND	ACTUAL	ACTUAL	EST.	EST.	EST.
110	BASIC AIR FORCE TRAIN	2.	2.0	2.0	1.0	1.0	1201	2052	2402.0
230	BASIC AF TRAINING	2.	2.0	2.0	1.0	1.0	837	1314	1674.0
350	ADV AIR FORCE TRAIN	3.7	4.0	4.0	1.0	1.0	109	162	403.3
470	ADV AIR FORCE TRAINING	3.7	4.0	4.0	1.0	1.0	76	104	281.2
STUDENTS COURSES CREDIT HRS NON LAB HRS LAB HRS RES ENRL IND ENRL									
ACTUAL TOTALS FOR 1ST SEMESTER 63-64...		2223.0	4	4760.5	4816.0	2223.0			
ESTIMATED TOTALS FOR 1ST SEMESTER 72-73...		3632.0	4	7716.2	7796.0	3632.0			
PERCENTAGE CHANGE...		63.4		62.1	61.9	63.4			

PURDUE UNIVERSITY
CLASSROOM REQUIREMENTS
1960 - 1968



COURSE PROJECTION...BASE SEMESTER-1ST 63-64...PROJECTED SEMESTER-1ST 72-73
 DATE RUN ...MAY 28, 1964

COURSE TOTALS									
AFT		COURSE DESCRIPTION		CREDIT HOURS		NON-LAB HRS		LAB HOUR	
CRS NO.	TITLE	CREDIT HOURS	NON-LAB HRS	RES HRS	IND HRS	NON-LAB HOURS	RES HRS	IND HRS	EST. ACTUAL
110	BASIC AIR FORCE TRAIN	2.0	2.0	1.0	1.0	2402.0	4104.0	4104.0	1201.0 2052.0
230	BASIC AF TRAINING	2.0	2.0	1.0	1.0	1674.0	2628.0	1674.0	837.0 1314.0
350	ADV AIR FORCE TRAIN	3.7	4.0	1.0	1.0	403.3	599.4	436.0	109.0 162.0
470	ADV AIR FORCE TRAINING	3.7	4.0	1.0	1.0	281.2	386.8	304.0	76.0 154.0
STUDENTS COURSES		CREDIT HRS		NON LAB HRS		LAB HRS		RES ENRL IND ENRL	
ACTUAL TOTALS FOR 1ST SEMESTER 63-64...		2223.0		4		4760.5		4816.0 2223.0	
ESTIMATED TOTALS FOR 1ST SEMESTER 72-73...		3632.0		4		7716.2		7796.0 3632.0	
PERCENTAGE CHANGE...		63.4		62.1		61.9		63.4	

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CLASSROOM REQUIREMENTS
1960 - 1968

